

J.P. NAIK

J.P. Naik Festschrift Committee

The Social Context of Education

Essays in honour of Professor J.P. Naik

Edited by
A.B. Shah



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Preface

ABOUT EIGHTEEN MONTHS AGO it suddenly occurred to some of us that J.P. Naik would be completing seventy years on 5 September this year. There was also a keen but remorseful realization that his friends and colleagues, admirers and well-wishers had not expressed in a public and collective manner their regard for him and their grateful appreciation of his sustained work, for almost half a century, in the field of education as thinker, writer, inspirer, organizer, and administrator. Proximity to a person often induces among his associates a tendency to take him for granted. But now that J.P. Naik was already approaching the Biblical span of three score years and ten, this debt brooked no further delay.

What other tribute could we render to a person of his unassuming eminence and selfless dedication to education than a felicitations volume consisting of well-thought-out essays on Indian educational problems? A small committee was therefore formed in order to plan such a *festschrift* and offer it to him as a token of our great regard for the man and our concern for the cause which he has made his own all his life.

We made an oversize list of contributors, tentatively decided the appropriate themes, and wrote to them inviting their contributions. Most of them responded enthusiastically. But those who finally wrote, with or without further coaxing, are much fewer than those who said they would. Admittedly this is a normal experience in all such undertakings, but there were also other exceptional mitigating factors. During this period the country was passing through the most difficult phase of its history since Independence – a sort of trauma which had benumbed practically all serious intellectual activity. And then suddenly it was all over, resulting in a burst of exuberant excitement. Both these factors are in some measure responsible for the relative slimness of the volume. As for the quality of its contents, it is best left to the judgement of the reader. We recognize that we should have done much better, but this is the best that we actually could.

In this volume there are twenty contributions on educational themes, including one by Mr. J.P. Naik himself in a quasi-humorous vein. There is also a touching personal essay by Mr P.L. Deshpande, an outstanding literary figure in Maharashtra, who has known and worked with Mr Naik long before the latter became a celebrity. Besides, the volume includes a brief chronological life-sketch of Mr Naik and a complete bibliography of his writings, for which we are grateful to Dr. (Mrs) Chitra Naik.

Our thanks are due, first of all, to the contributors but for whose cooperation this volume could not have been prepared. Thanks are also due to Mr B.V. Phadke and Miss C. Xavier for their secretarial assistance, and to Dr. A.V. Gadgil for sharing with the Editor the task of reading the proofs. Finally, we would like to record our appreciation of the patience, promptness, and efficiency with which Allied Publishers have brought out the book without compromising on the quality of production.

Pune

J.P. Naik Festschrift Committee

21 October 1977

J.P. NAIK FESTSCHRIFT COMMITTEE

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A.R. Kamat

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Contents

<i>Preface</i>	iii
<i>Contributors</i>	vii
<i>J.P. Naik</i>	ix
<i>A Select Bibliography</i>	xx
 To Begin a Revolution with a Revolution	 1
<i>J.P. Naik</i>	
Naiksaheb	14
<i>P.L. Deshpande</i>	
The Alternative to Schooling	27
<i>Ivan Illich</i>	
Thinking about Education	48
<i>F. Champion Ward</i>	
Social Goals and the Social Content of Education	54
<i>M.S. Gore</i>	
Educational Reforms in Underdeveloped Countries	68
<i>Gunnar Myrdal</i>	
Human Resources and the Contours of Development	76
<i>Mary Jean Bowman</i>	
Why is Elementary Education Unduly Neglected?	104
<i>C. Arnold Anderson</i>	
Education and Social Justice : A Conceptual Framework	113
<i>M.P. Rege</i>	
The Indian Educational System : The Crucial Decade	124
<i>D.A. Dabholkar</i>	
Education in India : Some Problems	132
<i>A.B. Shah</i>	
Educational Development in India : Trends and Search for Alternative Strategy	147
<i>H.N. Pandit</i>	
Some Problems of Technical and Medical Education	158
<i>B.D. Nag Chaudhury</i>	
Christian Educational Effort in India	167
<i>T.A. Mathias</i>	

Problem Areas in Nonformal Education	190
<i>Anil Bordia</i>	
Secondary Education	203
<i>A. R. Dawood</i>	
Education for Equality	211
<i>Vina Mazumdar</i>	
Education of the Scheduled Castes and Scheduled Tribes in Maharashtra	219
<i>Suma Chitnis</i>	
Education of the Scheduled Castes and Scheduled Tribes in Gujarat	244
<i>I. P. Desai</i>	
Education and Social Change	254
<i>A. R. Kamat</i>	
<i>Index</i>	271

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P.L. Deshpande, the well-known Marathi playwright, has been a member of the Sahitya Akademi, the Sangeet Natak Akademi and the Maharashtra Government's State Board for Literature and Culture.

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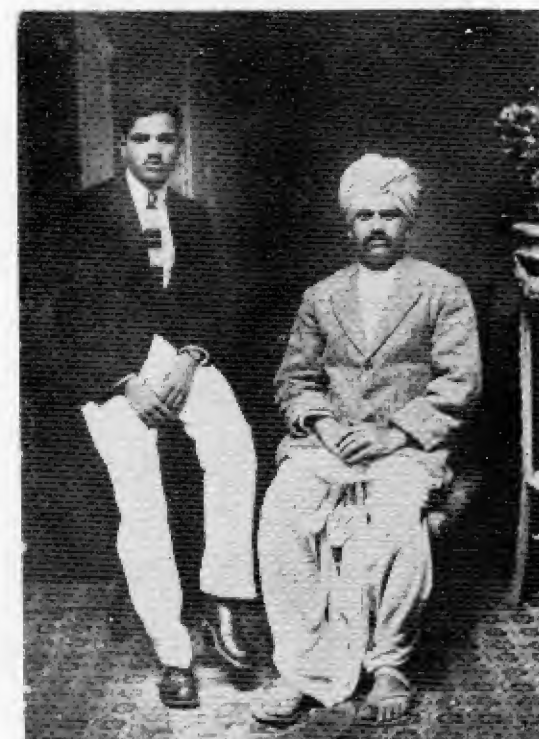
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F. Champion Ward was for many years Educational Adviser to the Ford Foundation in New Delhi and New York.



J.P. Naik

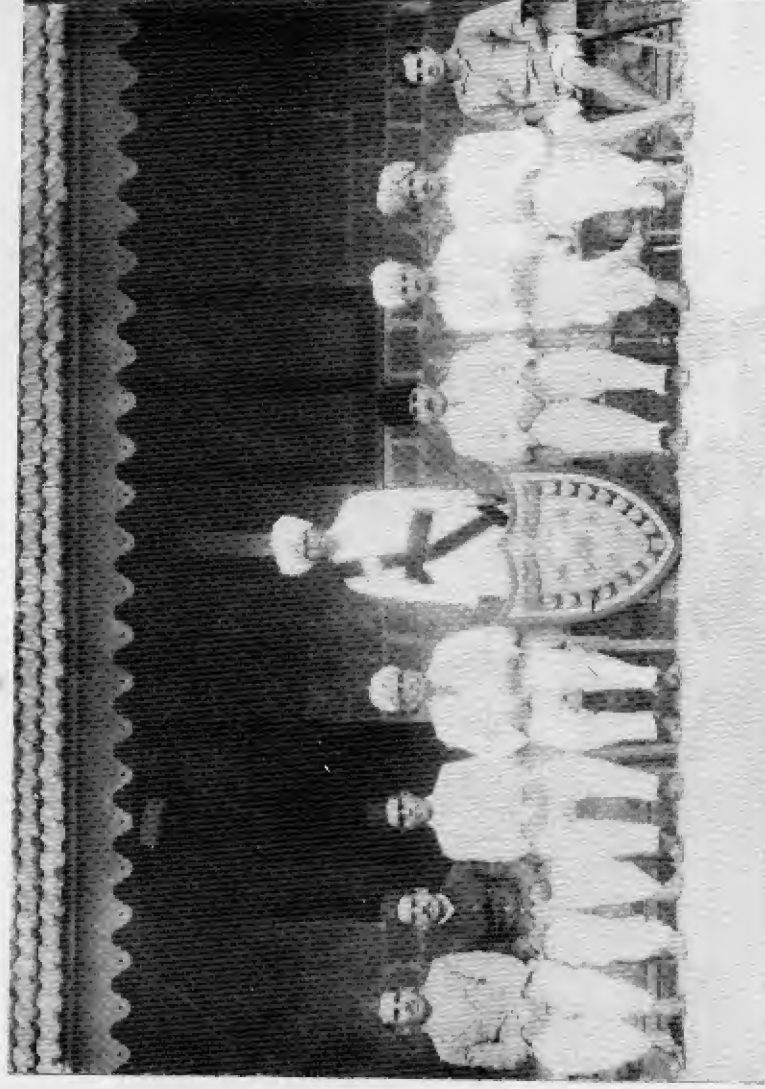


J.P. Naik

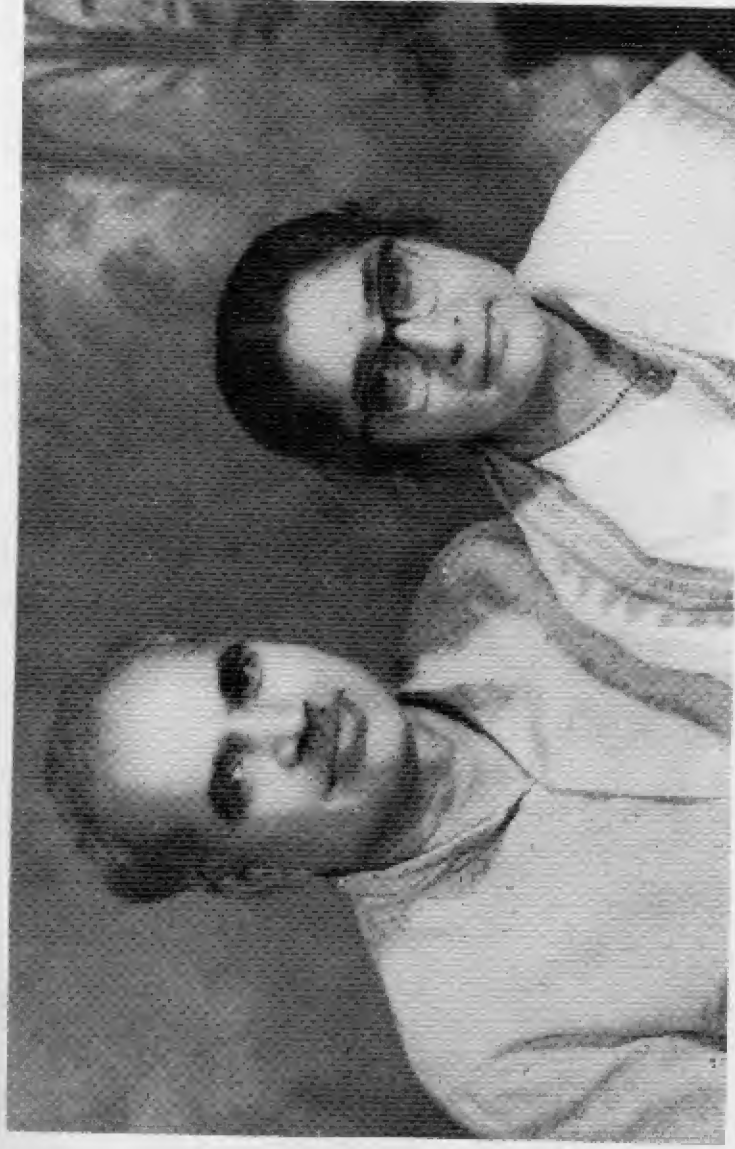
K.D. Mantri
(Brother-in-Law of Shri J.P. Naik)

The Taluka Village Improvement Committee, Dharwar.
(With Sir Frederic Sykes Village Improvement Shield)

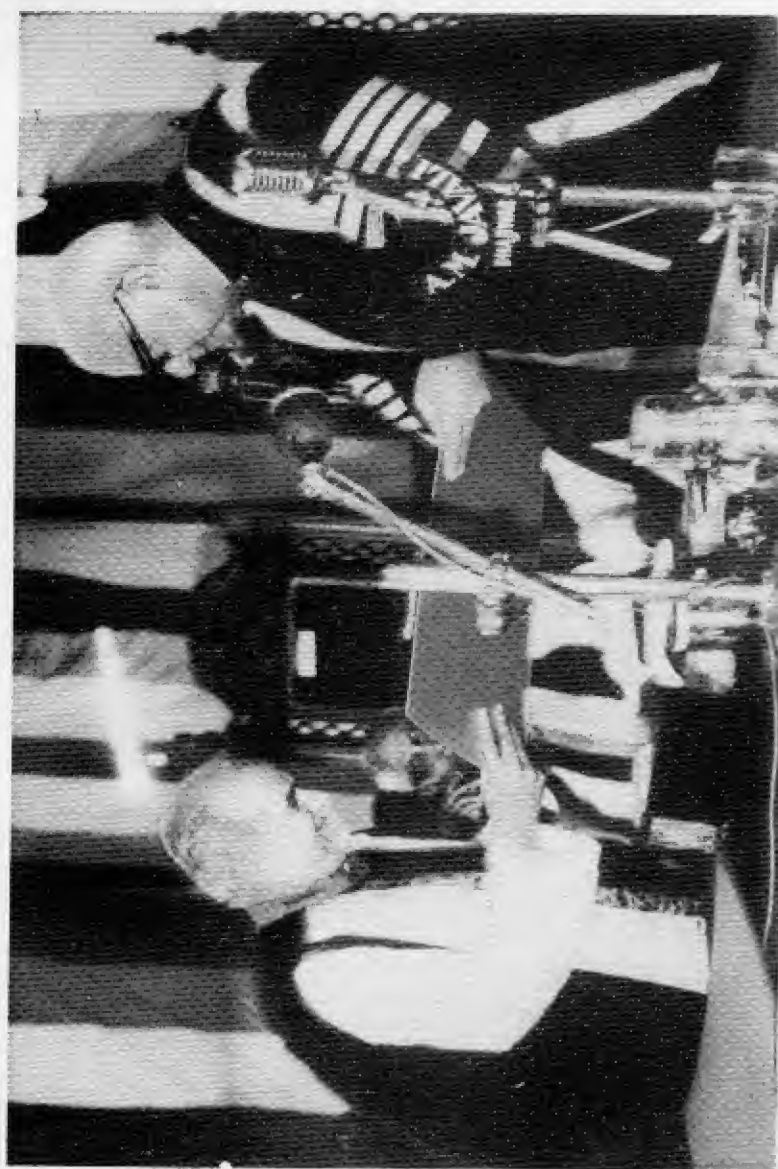
1937.



G. S. Hurla, V. R. Mudholkar, V. M. Patil, S. R. Baimangalkar, (Prant Officer),
A. B. Kazi, (Mamlatdar & Chairman), K. A. Kembhavi, M. S. Patil, J. P. Naik, (Hon. Secretary).



Mr J.P. Naik and Mrs. Chitra Naik, 1958



Mr J. P. Naik receiving the degree of Doctor of Letters (Honoris Causa) from Mr G. S. Pathak, Chancellor of Kanatak University in 1968

J.P. Naik

J.P. NAIK, KNOWN SIMPLY AS 'J.P.' to his friends and close associates, was born on 5 September, 1907 in the small village of Bahirewadi insignificantly situated in a backward corner of Kolhapur District in Maharashtra. His family was large and poor. His environment was rural, of which poverty and social inequalities were the chief attributes. Its impact on his mind was so deep that it has permeated all his basic interests and has become the persistent focus of his activities. Whichever field he turns to, his rural bias forcefully rises to the surface.

Education (1912-29)

Naik began to earn his keep at the age of five by tending cattle and working on farm jobs along with other children of his age. At the late age of seven he entered the village primary school which had classes I-IV and was the only educational institution which served the village. But he learnt in about two years all that the school had to teach and returned to the earlier task of agricultural labour and tending cattle. The happy accident of his sister's marriage into a family in Bail-Hongal near Belgaum suddenly changed Naik's destiny. His brother-in-law, an affectionate man, got him to attend the secondary school at Bail-Hongal (which had classes I-III) and later sent him to Belgaum where he could finish middle school education (classes IV-VII). At Bail-Hongal, the medium of instruction was not his mother-tongue Marathi but Kannada which he mastered quickly and maintained his first position at school. He had an equally good career in the secondary school in Belgaum, from where he matriculated in 1924. He joined the Karnatak College, Dharwar, where he passed through a socially and economically disastrous period and so transferred himself to Rajaram College, Kohlapur, from where he took his B.A. degree in Mathematics (1929). Throughout his educational career, Naik was known for three things: his voracious reading, not only of books on the subjects in the curriculum, but also of those which had little to do

with it; helping other students with their studies, occasionally to support himself but mainly for the fun of teaching and the joy in helping the less advanced students; and his extremely versatile interests which included such diverse fields as Mathematics, History, Sanskrit, English Literature, and the social sciences. His college contemporaries often tell juicy little anecdotes about how Naik, professedly a student of Mathematics, conducted B.A. classes in English literature while he himself was reading in the Inter Arts, and the attendance far surpassed what the regular professor of the subject ever hoped to attract. Extremely energetic, rebellious, sharp-witted, endowed with a keen sense of humour, bubbling with geniality, writing and reciting poetry, he became a great favourite with his classmates and even with some perceptive professors.

The Formative Years (1930-37)

In 1930, the restless young Naik gave up his newly landed job on the staff of Rajaram College in order to join the Civil Disobedience Movement. He was arrested and interned in the Bellary jail for more than a year. For him this was a valuable period of introspection and planning the future. He decided to devote the rest of his life to the education and service of the rural people. He got a chance to work as chief orderly in the jail hospital and studied medicine in a very practical way. For Naik, this constituted an additional advantage of his incarceration and along with education, health became his other and equally important interest. To this date, these twin interests continue to propel his work.*

On coming out of jail in 1932, he went to the village of Uppin-Betigeri in Dharwar district where he engaged himself in teaching in a primary school, conducting a dispensary, and promoting Khadi work. During this period, he started adult education classes and guided the villagers in organizing activities for improving their socio-economic conditions. The villagers gladly supported him, each house taking its turn to give him one meal of jowar *bhakri* and a bowl of curds. For his other needs, which were extremely few, they took out a collection of about Rs. five per month. Naik describes this as one of the happiest

*It may be mentioned here that his original name was V.H. Ghotge. He adopted the pseudonym of J.P. Naik while doing underground work in the Civil Disobedience movement. It stuck to him in jail; and when he came out, he found it more convenient to continue with it, especially as it marked a break with the past and indicated the beginning of a new career.

and most formative periods of his life when he acquired a real insight into the Indian society and its problems. The pioneering character of his work and his outstanding achievements won him the Sir Frederick Sykes Village Improvement Shield for Uppin-Betigeri in 1937.

Non-Official Worker at the State Level (1937-40)

A new direction in his life opened out when the first Congress Government was formed in the old Bombay State in 1937 with the late Mr B.G. Kher as Chief Minister and Mr Morarji Desai as Revenue Minister. He was invited to be a member of the State Boards of Primary and Adult Education and to help the new Government to develop innovative programmes of educational development. Thus began his career as a non-official educationist at the State level. His achievements in the field of primary and adult education between 1937 and 1940 are regarded as outstanding and form a landmark by themselves. It was also during this period that he came in contact with and became a friend and associate of leading non-officials like D.R. Gadgil (and later his two colleagues N.V. Sovani and V.M. Dandekar), R.V. Parulekar, S.R. Bhagwat, M.V. Donde, R.D. Choksi, Godavari Parulekar and M.R. Paranjape. He also developed close working relations with many senior officers of the Bombay Education Department like D.C. Pavate, Syed Nurullah, L.R. Desai, N.R. Trivedi, S.R. Tawde, Sulabha Panandikar, S.S. Bhandarkar and others. Eventually some of these became his life-long friends and gave him assistance and encouragement to develop his ideas and programmes. During this period, he established the Dharwar Prathamik Shikshana Prasar Mandal which conducted about 30 primary schools in the neglected and backward areas of Dharwar Taluka. In course of time, these schools were handed over to the District School Board for maintenance.

The Kolhapur Days (1940-47)

Another phase of hectic and extremely significant activity began in Naik's career in 1940. Rao Bahadur P.C. Patil, who was then Education Minister of the princely state of Kolhapur, invited him to assist in the educational reconstruction of the State which had been placed under the administration of a Regency Council after the death of its ruler, Chhatrapati Rajaram Maharaj. Naik started his work as a part-time educational adviser but soon rose to the position of Development Secretary. He became an official and administrator of

an unusual type who took no salary but worked for about eighteen hours a day. Taking a comprehensive view of education and development, he reorganized not only educational services but modernized the entire administration of the state and launched several programmes for improving communications, water supply, industry, agriculture, irrigation, power, health, cultural life and practically everything that concerned human welfare within the state, thus more than anticipating the Community Development programmes which were to take shape in the country after independence. On all this vast canvas of activities, what stands out most strikingly is his extremely imaginative work in the planning and improvement of the city of Kolhapur, the organization of a novel but simple scheme of village medical aid which may almost be said to anticipate the bare-foot doctor concept, and his formulation of a fifteen-year development plan for the state of Kolhapur which was the first and probably the only attempt of its type in those days. In Kolhapur Naik acquired another set of devoted friends who worked with him closely and helped him unreservedly. These included Rao Bahadur P.C. Patil, E.W. Perry and Sir Thomas Austin who were Prime Ministers of the State, N.V. (Baburao) Joshi, D.S. Mane and above all, Prabhakar Pant Korgaonkar. This very fruitful period however ended in 1947 when the Regency administration was dissolved. The new Maharaja who came into power decided to terminate Naik's services for reasons of his own which ironically enough, he chose to state as 'laziness' and 'dereliction of duty'!

Indian Institute of Education (1948-59)

Released from administrative burdens, Naik became a life-worker of the Korgaonkar Trust in Kolhapur, which he continues to be even today. In 1948 he shifted to Bombay where, in collaboration with R.V. Parulekar, T.K.N. Menon, V.V. Kamat, A.R. Dawood, N.P. Samant and C.D. Barfivalla, he established the Indian Institute of Education. It was then, and still continues to be, the only institution of its type in the country. It proved extremely useful in stimulating post-graduate and research work in education in Bombay State and brought out several valuable publications. Naik, however, was not content with only Bombay-based educational activities and the pull of the rural areas led him to establish Shri Mouni Vidyapeeth, a rural institute, at Gargoti in Kolhapur District. Here he had the benefit of working with Acharya S.J. Bhagwat who greatly influenced his ideas

not only of educational reconstruction, but of social development as well. It was also during this period that he met Dr Chitra Naik (1948) and married her (1955). She brought peace, mellowness, and stability in his life which changed it almost totally in all respects and improved both the range and quality of his work beyond recognition.

Union Ministry of Education (1959-73)

The next phase of his life again made him an official and administrator when, in 1959, the late Dr K.G. Saiyidain who was then Education Secretary with the Government of India and Dr. K.L. Shrimali, then Union Education Minister, invited him to Delhi. After a good deal of hesitation, he accepted the invitation. He was not sure what he would achieve but he was determined that he would continue his chosen style of life and would not allow himself to be corrupted by the influence of the capital. Throughout his career in Delhi, therefore, Naik has refused to accept a salary and maintained himself on his small earnings from lectures, books and other writings. He first worked as Adviser (Primary Education) and then in several other capacities till he became Member-Secretary of the Education Commission (1964-66). He rejoined the Ministry in 1966 and retired from active responsibilities in 1973. However, he still continues to be Member-Secretary of the Central Advisory Board of Education and assists the Ministry in the development of several programmes in which his assistance is sought. He has had the rare opportunity of working with nine Education Ministers: K.L. Shrimali, Humayun Kabir, Fakhruddin Ali Ahmad, M.C. Chagla, Triguna Sen, V.K.R.V. Rao, Siddharth Shanker Ray, Nurul Hasan and Pratap C. Chunder. As his good fortune would have it, all of these have trusted him and given him full support. His work in Delhi brought him the opportunity to work with the State Governments to many of whom he became a formal or informal adviser. This period also marks his close association with the Planning Commission and especially with its successive Deputy Chairmen and members in charge of education. Naik's work assumed a national scope and character and his circle of friends widened in proportion. It included leading educationists and thinkers in all parts of the country, State Education Ministers, Secretaries and Directors of Education, and top-ranking officials of the Central Government. Dr D.S. Kothari who was Chairman of the Indian Education Commission has considerably influenced Naik's thinking. He likes to mention this gratefully. During this period, he

had an opportunity to work with G. Parthasarathy, B.D. Nag Chaudhury and Moonis Raza in building up the Jawaharlal Nehru University. He looks upon all these friendships with particular pride.

The Indian Council of Social Science Research (1967-78)

Concurrently with the work he was doing for the Ministry of Education, Naik had the unique opportunity to work as Chief Executive of the Indian Council of Social Science Research, an autonomous organization of a national status. In November 1967, he was requested to implement the report of the V.K.R.V. Rao Committee on Social Science Research. Going through all the preliminary paces he was able to have the Indian Council of Social Science Research established in February 1969. He was then requested to become its first Member-Secretary. He agreed to do so on a provisional basis till the Council was in a position to find someone else for the post. Due to various reasons beyond his control, this short-term assignment got prolonged year after year. But in 1977 he firmly informed the Council that he would in no case continue in the post beyond 31 March 1978 and the Council finally agreed to release him. Naik claims that his nine years in the Council have been of immense value for his personal development. During this period, he has had the privilege of working under three distinguished chairmen, viz. Professor D.R. Gadgil, Professor M.S. Gore and Professor Rajni Kothari. He also had an opportunity to work with valued friends like Professor M.L. Dantwala, Professor D.T. Lakdawala, Professor M.N. Srinivas, Professor S.C. Dube, Professor K.N. Raj, Professor S. Chakravarty, Professor Ravi Matthai, Dr Kamla Chowdhury, Professor V.S. Vyas, Professor Durganand Sinha and others.

Writings

Naik's compulsive concern for the education of the poor has stimulated most of his writings on education. Universalization of elementary education has, therefore, been his main theme on which variations are constructed from the viewpoint of the historian, planner, administrator, researcher and a sensitive social worker fired with a missionary zeal, all of whom make up the curious amalgam that constitutes Naik's personality. When he delivers a lecture on elementary education his statistics are impeccable and planning proposals most rational but the tears that well up in his eyes when he talks of the deprivation of the poor, humanize the disciplined scholar within him.

His writings invariably reflect the same characteristics. He has drawn naturally on his personal experience of having belonged to the rural poor and having worked among them as a primary and adult educator, to build a philosophy of his own for educating them. But his theoretical formulations unfailingly result into practical propositions like multi-point entry and part-time non-formal education relevant to the learner's circumstances. In 1942, his first book on the subject, *Studies in Primary Education*, put forward a programme which would have, in his opinion, enabled the country to provide universal primary education for all children in about ten years. He elaborated this thought in several subsequent publications and particularly in *Elementary Education in India: The Unfinished Business* (1963) which was written when he received the Dadabhai Naoroji Award. A further development of his ideas gets expression in *Elementary Education: Promise to Keep* (1975) and *Some Perspectives on Non-formal Education* (1977) which the radical thinker Ivan Illich considers to be the best book he has so far come across on the subject.

Educational history has been Naik's first love. When he started working in villages in 1932, he began hunting for original sources on the development of education in India. He was so fascinated by what he found that he decided to write a history of education in the British period. Collaborating with his friend Syed Nurullah, he wrote the first and most comprehensive history of modern Indian education in 1944. This was revised in 1951 and has become a classic on the subject and is used all over the world. Naik has also published a shorter version of this book for students which is now in the Sixth Edition. In spite of his pressing duties Naik has persisted in his search for original sources and brought out, along with collaborators, two volumes of selections from old educational records.

Ever since he started writing on education, planning, right from the institutional to the national level, has been the theme of several of his publications. His predilection for planning is now turning towards finding alternatives to the existing system of education. This is apparent in his recent essays and particularly in *Equality, Quality and Quantity: The Elusive Triangle in Indian Education* (1976). What amazes Naik's associates is not only the innovative ideas he generates but their irrefutable statistical and research base. His original training in mathematics has been absorbed into his being and the amount of statistics he can produce from memory at appropriate times is a marvel. When he drafted the report of the Indian Education

Commission (1964-66) this capacity to bring about the marriage of relevant statistics with appropriate ideas won him everybody's admiration.

Committees and Commissions

Writings of reports is a very peculiar hobby which Naik has become addicted to as a consequence of his membership of several committees and commissions. He justifies this addiction by pointing out that if new ideas can be woven into the recommendations of official committees and commissions, they stand a fair chance of becoming concrete proposals for official action. The committees he has worked on have been varied and numerous, beginning in 1937 with the Provincial Boards of Primary Education and Adult Education in Bombay. The end of his committee work is not yet in sight. Some of the significant committees he has worked on are: the Kher Committee on relationship between State Governments and local bodies in relation to the administration of primary education; the National Committee on the Education of Women of which Mrs Durgabai Deshmukh was Chairman; the Primary Education Integration Committee of the old Bombay State of which he himself was Chairman; the Primary Education Committee of the Rajasthan State of which also he was Chairman; the Education Committee of the J & K State; and the First Review Committee of the NCERT. He has also been, as stated already, an active member of the Central Advisory Board of Education and has continued to be its Member-Secretary since 1967. The monumental report of the Indian Education Commission—*Education and National Development*—which he drafted as its Member-Secretary has been internationally recognized as a brilliant document.

An Institution-Builder

All along, Naik has been an assiduous institution-builder. In every phase of his own development, he has thrown himself wholeheartedly into constructing structures for further development of ideas and programmes. The Dharwar Prathamik Shikshana Prasar Mandal, the Indian Institute of Education, Shri Mouni Vidyapeeth, and the Indian Council of Social Science Research are such landmarks. In his quiet but effective way, he has also assisted a large number of his friends and colleagues in establishing or developing their own institutions. But to Naik, building up individuals is even more important than building up institutions. Throughout his life, therefore, he has sought out and

helped young and deserving persons. The number of individuals he has thus assisted is large and he takes a great joy in the fact that many of them are now playing important roles in different walks of life.

Health and Medical Services

Problems of health and medical services, especially for the rural areas, has been Naik's special interest. During the last four years, he has been working on a programme of *Alternatives in Health* in collaboration with friends like Dr C. Gopalan, Dr V. Ramalingaswami, Dr P.N. Wahi, Dr P.N. Chuttani, Dr N.H. Antia and Dr Raj Arole. His basic thinking on the subject has been summarized in his *Laxmanswami Mudaliar Oration* delivered at Chandigarh in 1977. He was a member of the Srivastava Committee which made a break-through in the traditional thinking on health services and of the Gopalan Committee on Drug Addiction. In collaboration with his friends from the field of health, Naik hopes to continue his studies and assist in the formulation of a realistic alternative policy for the development of health and medical services for the country.

International Activities

In 1950 when UNESCO invited him to write a study of compulsory primary education in India and to participate in a regional seminar on compulsory primary education held at Bombay in 1952, Naik's activities crossed their national boundaries. In 1959, he was invited again as consultant for the development of a UNESCO plan for the provision of universal elementary education in Asia. The plan he then prepared was formally adopted at the Karachi meeting of Asian Member States held in 1960 and came to be known as the *Karachi Plan*. This was further discussed in a subsequent meeting held in Tokyo in 1962 where he was present as a UNESCO consultant. It was at the Karachi meeting that Naik first met Dr Malcolm Adiseshiaiah. Soon they became friends and between 1960 and 1972 he had several opportunities of working with Dr Adiseshiaiah in UNESCO's educational programmes. The meeting of African States in Addis Ababa in 1961, when a plan for the development of African education was adopted and the meeting of the Arab States held in Beirut for a similar purpose in 1967 were important for reshaping Naik's own thinking. His outstanding contributions at such meetings

won international respect for his work and he began to be invited by international bodies to participate in discussions on educational development and planning. Among these, mention may be made of the International Institute of Educational Planning, Paris, for which he has recently accepted an assignment to write a book on the planning of primary education and the Dag Hammarskjöld Foundation, Uppsala (Naik is a member of its International Advisory Committee) for which he is working on alternatives in educational development. Naik is one of the few educationists in India who have large international contacts and whose advice is often sought by international agencies and friendly foreign countries. Naik has many close friends in the international community. These include, besides those whose contributions appear in his volume, Dr Harold Howe II, Professor and Mrs Rudolph, Professor H.L. Elvin, Mr Majid Rahnema, Mr J.F. McDougall, Mr Asher Deleon, Professor Cyril E. Beeby, and Professor Ian Lister.

Future Plans

Those who have known Naik from his school and college days have often wondered how he could bring himself to spend nearly nineteen years in Delhi which, in style and spirit, is so far removed from rural life. Naik has always been a villager through and through in food, clothes, easy camaraderie with the simple and the indigent and disregard of what is known as polish of manners. But Delhi, though not quite to his taste, has contributed much towards the widening of his intellectual interests and contacts with other creative minds. Time and again, however, he has expressed his longing to return to the rural setting. He has also set his heart on building up the Indian Institute of Education at Pune and side by side, to develop his favourite theme of *Alternatives in Development*. Eventually, he hopes to live and work in a village just as he did in the first flush of his youthful idealism. There, undisturbed by the city's jar, he may once again find a sure outlet for his multipronged energies which seek to build man and his environment together into a blend where rational vision blissfully merges with the poetic and where the simple joys of life conquer the craving for possessions and power.

Times have changed and so has Naik while garnering insights and wisdom from whatever he has experienced and whomsoever he has met. But it is not difficult for his friends to see that if left to himself he would be entering another Uppin-Betigeri even after a crowded

interregnum of forty-five years, mixing with the villagers, talking excitedly about plans for change, sitting on the floor of a hut regaling himself on jowar bread and curds, entirely unmindful of how he looks in soiled khadi shorts and a shirt with an irreparable rent in its back. That is the real Naik, known simply as 'J.P.' to his friends who are legion.

A Select Bibliography

1. Naik, J.P., *Studies in Primary Education*. Bombay, Local Self Government Institute, 1942.
2. Naik, J.P., *History of the local fund cess (devoted to education) in the Province of Bombay, 1839-1937*. Bombay, Local Self Government Institute, 1942.
3. Naik, J.P., *Training of Educational Administrators*, New Delhi, Ministry of Education, 1952.
4. Naik, J.P., *Research and Experiment in Rural Education*, New Delhi, Ministry of Education, 1953.
5. Naik, J.P., *Review of Education in Bombay State, 1855-1955*. Bombay, Education Department, 1958.
6. Naik, J.P., *Agra University Extension Lectures*. Agra University, 1961.
7. Naik, J.P., *Role of Government of India in Education*. New Delhi, Ministry of Education, 1963.
8. Naik, J.P., *Single-teacher School*. 3rd ed. Delhi, Manager of Publications, 1963.
9. Naik, J.P., *Educational Planning in India*. Bombay, Allied Publishers, 1965.
10. Naik, J.P., *Elementary Education in India: the unfinished business*. Bombay, Asia Publishing House, 1966.
11. Naik, J.P., *Education in the Fourth Plan: Review and Perspective*. Bombay, Nachiketa Publications, 1968.
12. Naik, J.P., *Educational Planning in a District (A Discussion Paper)*, New Delhi, Asian Institute of Educational Planning and Administration, 1969.
13. Naik, J.P., *Institutional Planning (A Discussion Paper)*, New Delhi, Asian Institute of Educational Planning and Administration, 1969.
14. Naik, J.P., *Education of the Scheduled Castes 1965-66*. New Delhi, ICSSR, 1971 (ICSSR Occasional Monographs No. 6).
15. Naik, J.P., *Education of the Scheduled Tribes, 1965-66*. New Delhi, ICSSR, 1971 (ICSSR Occasional Monographs No. 5).

16. Naik, J.P., *Role, Responsibilities, Functions, Programmes and Organization of the ICSSR: A Policy statement and a special report*. New Delhi, ICSSR, 1971 (ICSSR Occasional Monographs No. 7).
17. Naik, J.P., *Access, Structure and Quality in Higher Education*. Mysore, Mysore University, 1972.
18. Naik, J.P., *Some Aspects of Post-Independence Development in India*. Sambalpur, Sambalpur University. (Lal Bahadur Shastri Memorial Lecture, 1974).
19. Naik, J.P., *Elementary Education in India: A Promise to Keep*. Bombay, Allied Publishers, 1975. Reprints 1976.
20. Naik, J.P., *Equality, Quality and Quantity: The Elusive Triangle in Indian Education*. Bombay, Allied Publishers, 1975.
21. Naik, J.P., *Policy and Performance in Indian Education, 1947-74*. New Delhi, Orient Longman, 1975.
22. Naik, J.P., *Alternative System of Health Care Services in India: Some Proposals*. Bombay, Allied Publishers, 1977.
23. Naik, J.P., *Some Perspectives on Non-Formal Education*. Bombay, Allied Publishers, 1977.

Books Edited

24. Naik, J.P., Editor, *Educational Writings of R.V. Parulekar*. Bombay, Asia Publishing House, 1957.
25. Naik, J.P., Editor, *Review of Education in India, 1947-61: The first year book of education*, New Delhi, NCERT, 1961.
26. Naik, J.P., Editor, *Development of University Education, 1860-87: Selections from the Educational Records of the Government of India*. Delhi, Manager of Publications, 1963.
27. Naik, J.P., Editor, *Elementary Education in India: The Second Year Book*. New Delhi NCERT, 1964.

Books in Collaboration

28. Naik, J.P., and Nurullah, S., *History of Education in India During the British Period (1800-1947)*, Bombay, Macmillan 1943, Revised Edition 1951.
29. Naik, J.P., Saiyidain, K.G. and Abid Hussain, S., *Compulsory Education in India*, Paris, UNESCO 1952.
30. Naik, J.P. and Nurullah, S., *Students History of Education in*

India 1800-1973. Sixth revised edition. New Delhi, Macmillan, 1974. (This has also been translated in Hindi and published by Macmillan & Company, New Delhi in 1976 under the caption: *Bhartiya Shiksha Ka Itihas*).

31. Naik, J.P., and Ghosh, Suresh Chandra, Editors, *Development of Educational Services, 1859-1879*: Selections from the educational records of the Government of India. Vol. I Pt. 1 (New series), New Delhi, Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University, 1976.

The bibliography does not include papers published in Journals nor books in Marathi and Kannada.

J.P. Naik

To Begin a Revolution with a Revolution

Foreword

A REVOLUTION IN LIFE and a revolution in education have always to go together, because education is life. An educational revolution could have followed (and should also have done so) when a political revolution in our life took place in 1947, in the form of the attainment of independence. This possibility and its need were stressed by Pandit Jawaharlal Nehru as early as 1948. Speaking at the Educational Conference convened by the Ministry of Education in that year, he said:

Whenever conferences were called in the past to form a plan for education in India, the tendency as a rule was to maintain the existing system with slight modifications. This must not happen now. Great changes have taken place in the country and the educational system must keep pace with them. *The entire basis of education must be revolutionized.*

We did not make the most of this opportunity, to the detriment not only of education but of life itself.

A second chance for this purpose – a very rare occurrence in life – has come again: an educational revolution has now to precede a socio-economic revolution in life. We have embarked upon a great adventure of national reconstruction whose objective is to abolish poverty, unemployment and ill-health and to create a new social order based on the dignity of the individual, liberty, equality, and social justice. This revolution will not be possible unless there is a simultaneous educational revolution to create an educated and cultured nation imbued with the values essential to such a social order.

The next ten years will decide how we utilize this second chance. If

used properly, it can lead us on to the great society whose vision inspired our great leaders and help us claim our rightful place in the comity of nations.

Destiny is ruthless. She generally gives *one* chance for survival and we are indeed very fortunate to have had *two*. For sheer lack of proper planning and adequate effort, we missed the first. Can we dare miss the second?

The Dream of a Dictator-That-Was-Not-To-Be

I AM NOT, DEAR READER, A HABITUAL DREAMER. On the other hand, I sleep like a log and either do not dream at all or at least never recollect what I have dreamt, very probably because I do most of my “dreaming” when awake.¹ But yesterday I dreamt, for the first time in years, and to be honest about it, I do not know when I shall dream again, if I ever do it at all. And believe me, it was no touch-and-go affair. The dream was so vivid and so moving that on getting up I had some difficulty in convincing myself that I was not awake and that I was, really and truly, “dreaming”. I had, however, to accept the reality and try to forget all about it. But since I did not forget it either and since it kept on recurring again and again, I decided to write about it which I have found is the best way to get out of a haunting memory.

What was remarkable about the dream is a queer contradiction it presented, so queer indeed that I do not know how it could ever have happened at all. I dreamt that I was the dictator of India – God forbid! – and that I was trying to put across a certain programme of educational reconstruction. Now I am so confirmed a democrat and so proud that India has opted for a democratic way of life that I cannot think of a dictator in India; and what is even more important, I am sure that I am not made of that sterner stuff the dictators are moulded from. Apart from its impossibility, therefore, I could not also think of a more unsuitable choice of an individual. And yet there it was, a total *fait accompli*. On the other hand I would love to rebuild education, not through orders and rigid uniformities the dictators are so fond of – Napoleon, they say, could pull out a watch from his pocket and say what every schoolchild in the French Empire was doing at the moment – but through persuasion (I so love to talk) and through building up the initiative, the freedom and the creativity of

1. There are, of course, a few friends who assert that I hardly do anything else. But I am afraid they are a little unkind.

teachers and students. I thus found that I was doing what I loved, in a way that I perfectly hated. But the fact was that I enjoyed it and judging from the reactions of my “dream” people, I also seemed to be doing it well. I have no desire to rush you, dear Reader. You need not take me on trust for both the parts of this statement. Towards the end of this story (assuming that you remain awake and patient enough till then), you may be able to judge the second part for yourself.

MY FIRST RECOLLECTION is that of a Cabinet session wherein I had called my Secretaries to discuss the plans for implementing a programme of educational reconstruction. They were all there, except for the Education Secretary, who I came to know later had insisted on personally bringing to the meeting a copy of the Report of the Education Commission (with its underlying papers and supplementary volumes) and had literally collapsed under the weight and had to be rushed to the hospital. In the hullabaloo that followed, the copy of the Commission’s Report, which was the only one available, got lost (I cannot say fortunately or unfortunately), and for a minute we did not know what to do. The situation was, however, saved when the Finance Secretary pointed out that, with the Report of the Commission having been thus disposed of, the implementation of the programme² need be held up no longer. So we decided to go ahead with the plan. Two other favourable developments which were hailed by all those present also happened simultaneously. All our friends in advanced countries informed us that they would not lend us any “experts” and that they would give us no “aid”, with or without strings. This, the Home Secretary said, was good in every way because with no experts to misguide or confuse us, we were likely to do some sensible things and that, with no money to squander or throw about, we stood a sporting chance of concentrating on the essentials. Anyway, we began under good auguries (like all dictators, I also became a little superstitious in my dream).

After the discussion about implementation had gone on for a while, we soon realized that we were up against two formidable difficulties. The first was that we could not decide *where* to begin, because of the sheer length of the recommendations on educational reform. My Scientific Secretary told me that if all the educational recommend-

2. Oh, I forgot to mention. My first order on assuming charge was to abolish the Planning Commission, not so much to plan better as to be able to plan at all.

ations in the post-Independence period had been put end to end instead of moving in a circle as they usually did, every student and teacher would have walked up to the moon long ago and forestalled both the USA and the USSR (or is it the other way about?). The second was that every trick known to the world for launching a new programme – national broadcasts, celebrations of national days, issue of special numbers, token implementation by big guns like governors and ministers, and so on – had been so often tried in post-Independence India and made to fail so completely that we could not also decide *how* to begin. For instance, we were all opposed to the idea that this programme should begin like the *Hard Work Campaign* of the government when ministers went to schools to celebrate *Shramdan* days, kept the children waiting for three to five hours by coming late, then made them listen to a long and boring talk which no one understood (and where the poor headmaster came into trouble because, although the children had loyally carried out his commands to clap hands frequently and loudly, the poor innocents had done so at the wrong points) and then declared a holiday in honour of his visit so that it turned out, after all, to be a fairly tolerable holiday. Yes, we all knew the don'ts! My Information Secretary had prepared an elaborate dossier of what we should *not* do by carefully compiling what the Government of India *did* do. But, then, where could we go from there?

Well, to be frank about it, we were just stumped and could not, for the life of us, decide where to begin and how.³ It was at this point that my wife walked in with the usual tea and cashewnuts. I never knew that dictators liked cashewnuts – that made me feel that they were almost human. And by the way, that's another of my problems. I am not a dreamer, so I can't say much about it. But you folks who dream perhaps know better. I guess menfolk see a lot of women in their dreams; but does one really see one's own wife? Anyway to come back to the point, I was glad that my wife came in because she always has an answer for most of my worries – and that, by the way, is why I married her – and seeing the worried look on my face, asked me what the trouble was; and when I put it to her, she smiled – she has an illuminating smile, you know – and said:

3. The poet who said that a little knowledge was a dangerous thing was a fool-well, like most poets. But I never realized until now how dangerous a thing a "know-all" state can be!

"Silly, why do you worry so much about it? Whom is education meant for?"

"Why, for the uneducated, the illiterate, the unilluminated", I said.

"That's it. A good businessman consults his customers – they are always right (this is the secret behind the American dollar). So why don't you consult your customers? Get together a dozen elderly illiterate men and women and ask for their advice. Never having been to a training college, they will perhaps give you the right advice for educational reconstruction."

That settled it. This was the best advice we had so far; and even if it were not – tell me, can anyone disregard his wife, or what is worse, a dictator's wife? We quickly got together nearly two dozen illiterate dumbs – every Secretary present could contribute a servant for the purpose though he had no advice to offer – and we took counsel with them and made up our plans. I will tell you only the plans and not bore you with the details of our long discussions : we were all so used to the learned inanities that fly about in the discussions at the Government of India meetings that one had to make a supreme effort to understand robust commonsense. But I assure you it was worth it, every minute of the time we spent with them.

MY MAIN OBJECT, I said, was to bring about a revolution in Indian life. For this I need a revolution in Indian education. And yet all the traditional preparations made to usher in the revolution were so mild, so slow, so evolutionary that they even surpassed the elaborate precautions taken by Bottom the Weaver, while introducing the lion on the stage, to ensure that the ladies were not frightened. The existing programmes were such that they could never have roused anyone to anything and it would have been nothing short of a miracle if revolutions could have been made to creep imperceptibly in like the Five Year Plans in education! My advisers told me that they were not educated, but they certainly knew one thing: an attempt to create a revolution must begin with a bang like the blast of a bomb or a splash created by the dropping of a big stone in a pool of stagnant water and that it must shake everyone up, squarely and fully. This was so obvious a thing that we had never noticed it! One does not easily realize that the sophisticated art of education consists mainly in blinding people to the obvious, without necessarily enabling them to see the subtle.

Anyway, we decided to begin a revolution with a revolution – as

simple as that, as our dear friend Nicholas DeWitt would have said. From this point of view, our first decision was that the current school year should begin on the same day all over India – on 14 November. It was a memorable day, the day a revolution in human form was born in this country, a day that is climatically pleasant everywhere, from Kanyakumari to the Himalayas, from the Rann of Kutch to the Bay of Bengal. This itself was a revolution: the people said that something like this had never happened before in the country. I could not be certain and so I asked my Information Secretary to check up. He said that there was a precedent and that one event, the financial year, always began in all parts of India exactly on the same day, the first of April, which is also distinguished by being the day of all fools, and that this was the one uniformity which the Government of India (of the old Imperial British variety and *not* the *deshi* one, mind you) in its wisdom had decided to introduce. Anyway, when wise people decide to act like fools, fools like me will be compelled to act like wise men just to be different. What does it matter in a poor country (that is probably an understatement – I should have rather said, in the poorest country in the world) when the “financial year” begins? We all know too well that the “financial” part of it has never existed and that the “year” part of it is only starvation for 365 days. But an *educational* year in India should begin on the same day throughout the length and breadth of the country! What a tremendous difference it would make for every child to know – and they are not a few, they now form 15 per cent of the population and will soon rise to 24 per cent – that all over India, all children, boys and girls, will begin their studies at the same time and on the same day, a day that is hallowed by the memory of the great one, an inspiring memory that can never die and that now springs up afresh every year, in every flower that blows in the wind, in every grain that ripens in the sun and in every ripple that laughs on the flowing waters of every river! Anyway, we decided to do so and what is probably even more important, actually did it, you know. And by God, shall I take you in confidence? The entire press⁴ in the country applauded three features of this decision, features which they said were conspicuous by their

4. You would have guessed by now that the press had every chance to survive in my dictatorship. Who else would publish my speeches, free of charge, otherwise?

absence in the earlier regime⁵: novelty, quickness, and immediate and firm implementation.

The second decision was equally different and equally revolutionary. All schools and colleges were told that all regular studies should be suspended for six months and that they would have to complete them and pass the examination in the remaining six months of the year only. This was done because we all knew that the curricula were very light, that they did not offer an adequate challenge to the students, and that there would be no educational loss if a period of six months could be carved out from the school year for some other purposes until more appropriate and fuller curricula were prepared and introduced from the next year onwards. On this point, however, our uneducated advisers were not very happy. They were first of all shocked when we told them that the entire year was meant for study and that students were expected to work from 24 hours to 50 hours a week according to their age. They were under the impression that we send our children to schools to play, to make merry, to roam about and generally to develop all those attitudes of intransigence, superficiality, and laziness that mark the scions of the upper classes. They thought that study was meant for examinations, that it should precede them by about two months – if you do not discover, in the meantime, easier methods of passing them, honest or otherwise. But anyway, we educated them on this subject and they understood our view quickly. In fact, the Secretaries were aghast at the speed of their intake – they said that they had never seen a minister understand a point so quickly and so well! Anyway, it was agreed that all the studies in the first year were to be completed in the second six months only; and everyone felt that this was a generous allowance and that if they had known earlier that dictators could be so considerate, they would have – well, let it go.

Our next problem was to find what to do with the six months we had on our hands. Teachers, students, departmental officers, budget provisions for their salaries, everything was there except one; a programme which, unlike the existing brand of education, had some social purpose in it. So we said that everyone should make a gift of

5. By the way, dreams can be funny, you know. I have a distinct recollection that my dictatorship came in before both Nehru and Shastri so that they are not impeached here in the expression “earlier regime”. I know that this is historically impossible. But you know that in dreams as in the Security Council, *anything* can happen.

these six months to national service and actively participate in the creative and joyous task of rebuilding the greater India of our dreams. There was no need for any but some marginal expenditure connected with the programmes; all that we proposed was that the teachers and students should carry on the work of their schools in the normal way and, instead of the usual studies in text-books, develop appropriate programmes of social service in their own areas. Some general guidance was to be given; but they were told that it was for *them* to find out what they could and should do and to do it. National service is like service to God : He never asks for anything. It is for man to find out what he can best offer and offer it.

It was decided that we should address a letter on the subject to all schools. Writing to the State Education Departments was obviously no good because, for quite some time, they had developed a habit of reading only financial sanctions that came from the Centre and nothing else. And so we drew up a programme for all educational institutions. I must say that our illiterate advisers were most helpful here. They did not know any theory, nor could they put it in inch-long words but they knew what was what. According to them, a child became a man or woman (and what else can be the object of education) by living in society and participating in all its joys and travails in a normal manner. They could never realize what we gained by withdrawing children from the community and by letting them grow in the artificial hothouses called "schools". That, they said, was one reason why they wisely did not send their children to school – a reason which the educated people were too ignorant to follow. But when we told them that the teachers and children shall jump the classroom walls and that the schools shall be communities in themselves and shall also be brought together in closer contact with their local communities, they were all too jubilant and approving. In fact, they came out with innumerable ideas about how this could be done, and very soon we were able to compile a document addressed to the students and teachers, explaining broadly what they should do during the next six months for offering their services to the nation.

I SAID "A DOCUMENT", but that was not quite correct. It was really a series of documents, one for each category of institutions, because we soon found that the programme had to differ from one type of institution to another according to the age, maturity, and specialization of the students. But certain items were common to all.

For instance, the entire institution was to meet together at the beginning of the schoolday and offer a prayer. This was to be followed by a suitable programme of talks, discussions, or supervised reading about national reconstruction arranged to suit the level of the students.⁶ Then a certain part of *shramdan* was obligatory. All cleaning and upkeep of the school building and its campus was to be done by the students and teachers (unless it was proved to be impossible), and all funds provided for it in the budget were to be diverted to the students' welfare fund. The development of the campus, the cleaning and development of village sites or urban slums was also to be taken up, the general understanding being that every student and teacher should offer *shramdan* for at least three hours a day. A new idea of "homework" was adopted. At present, homework really means school work meant to be done at home by students, parents and private tutors. Our illiterate advisers pointed out that this was a modern educational perversion of a good old custom of children working at home to assist their parents. So we said that "homework" would, in the future, mean the work which children did at home to assist their parents and particularly the mother, and adopted a rule that every child should do "homework" for two hours a day. In order that it might not get ignored, we insisted on a record being maintained in prescribed forms and this record was made an integral part of the requirements for passing.

The steps taken to meet the national food crisis were regarded as national service and were obligatory for all. It was explained, for instance, that the overall food deficit of 7 or 8 per cent that we had at present could be made up, almost fully, if *everyone* gave up one meal a week at least and those who could give up two. It was directed that all teachers and students should fast for one night a week at least and that this should be regarded as an integral part of the school work.

A mass campaign for literacy was to be organized and all teachers and students above middle school had to make adults literate in this period of six months by going to their homes to teach them. Students were also expected to read out daily newspapers and explain the news

6. A knowledge of our cultural heritage, lives and writings of great Indians, history of the freedom struggle, national goals as defined by the Constitution, a vision of the new social order that we are striving for and the means for its creation, the Five Year Plans, etc.

to illiterate people.⁷ Teachers and professors were to meet groups of adults and discuss with them the national problems facing us and the way to solve them. In fact, we soon realized that if we could make each university teacher to meet the illiterate or semi-educated citizens and require him to continue their adult education for a period of six months, the worst resistance to a solution of the problem of the medium of instruction at the university stage would have been overcome and the problem would be solved without any difficulty soon afterwards. Anyway, we insisted that the university should go to the masses and meet them and accept adult education as one of its main functions.

Ostentation was to be banned: everyone had to wear a simple dress. Expenditure on hostels was to be cut down to the minimum, partly by introducing simpler and more hygienic food and partly by reducing overhead charges through student participation. Regular studies were not totally taboo. In fact, studies were to be encouraged, subject to two conditions : (1) they should not cut down the time for national service, for four to six hours a day; and (2) they should be integrally related to the national service programme undertaken. Moreover, senior and advanced students were required to help the weaker and backward students regularly and this was to be regarded as their national service, if they so desired. In fact, our view was that studies so organized would be more realistic and more interesting and so help in raising standards. This forecast was found to be fully justified in later evaluations : physical fasting improved health and the mental fasting caused by stoppage of the regular inert studies kindled interest in life and roused curiosity. In short, the whole philosophy and methodology of the movement could be summed up in the following *Testament* which all children were to read and pledge themselves to everyday.

Beloved Bapuji and Chachaji,

You helped us to discover our country to ourselves, to visualize the great destiny towards which it is marching and to commit ourselves to it, and thus gave us faith and confidence in ourselves and in our country's future.

We are the fortunate few of our generation who are privileged to receive education. We realize that in order to provide this privilege to us millions of

7. In addition to this obligatory part, some students should do further work connected with their speciality. For instance, medical students could treat sick people, agriculture students could help farmers, etc.

our poor countrymen are toiling hard and denying themselves even the necessities of existence. We, therefore, pledge ourselves to return this favour by identifying ourselves with the lot of the common people and shall ever strive our best to serve them.

We realize that in the modern world the best insurance for each individual is a social order based on equality and justice and that salvation can never be achieved through selfishness. We shall ever strive to subordinate our desires to the common good.

We realize that India is poor and underdeveloped today. At this moment, the only way to progress lies through toil (much of which is drudgery) and austerity. We shall accept these willingly in order that a tomorrow of less strenuous or more pleasant work and greater comforts may soon be born.

We realize that we are a privileged generation. No earlier generation had this challenge and opportunity of building up a prosperous India. No succeeding generation can have it either, because we hope to complete the task ourselves. No price can be too high to be paid for this privilege.

And thus the revolutionary school year began on the 14 November; and the programme went on so magnificently and such keen enthusiasm was generated that the results surpassed all expectations. And, my God, what a hectic six months I had: touring, talking, seeing, participating, guiding and, above all, learning and getting some new insights into the problem which, for instance, all the learned and bulky documents of the Ministry of Education and of the Planning Commission had totally missed and which I did not find even in the speeches and writings of _____⁸ who is the Holy Trinity in Indian education (and probably in many other things too), I mean, the trinity of : (1) I-know-all; (2) I-am-always-right; and (3) you-are-an-ignoramus-who-goes-wrong-when-you-do-not-agree-with-me. For instance, I had never realized before that money can do so little really to vitalize education and that what was really needed were two things; (1) a sense of commitment, a commitment beyond self, a commitment to great and abiding values which give a meaning to life; and (2) the creative joy of participating in a worthwhile task. I had never realized so vividly at any earlier time that the apathy, the listlessness, the so-called indiscipline of students and all the endless malaise of our educational system really arose from one cause : what happened in the classroom was an inert action that had long ceased to

8. You can substitute your pet aversion here. It should not be difficult to make a choice: this has been a large and an increasing tribe for some time. It arose among the politicians and is now spreading to the next kinship group, university professors who are not professors.

have any meaning either for the students or for the teachers and that, even though both were trying to keep up a show that they were engaged in a worthwhile or momentous task, the illusion could no longer be maintained for the bulk of students and teachers. This, in fact, was the main point of our illiterate advisers. They said that men would always appreciate a good thing when they saw it. If education was not being valued by society, the educator, they said, must look within and see whether what he was trying to sell as gold was really gold. But instead of doing so, he merely got into a temper (a sure sign of weakness) and called others ignorant, which, to say the least, was very uneducated behaviour. We all agreed with them that the best way to “sell” education was to make it “saleable” and what better way can there be to sell it except to link it intimately with the entire programme of national reconstruction so that the future of education becomes the future of the country itself?

Of course, I spoke first of what I learnt – all dictators always begin (and most of them must also end) with themselves. But all other departments, government itself, learned such a lot. In the beginning, the other departments of government were asked to assist the programme. In doing so, they could not but get themselves infected with the new enthusiasm so that there was a general dynamism in all government departments. What the Army and the Jawan had begun, the schools and the students continued and deepened.

We also discovered that the “day” or “week” celebrations⁹ we used to indulge in (e.g., the Harijan Day, the Social Education Day; the Saffai Day, etc., or the Courtesy Week, the Basic Education Week, etc.) were really the worst administrative invention of the post-Independence period. This discovery of the celebration of days or weeks was a feat of genius in the difficult situation which we inherited on the attainment of independence. On the one hand, we had inherited a large number of noble ideas from our national leaders which we could not repudiate. On the other hand, we were not prepared, in a mad rush to cash on past sacrifices, to suffer or work hard for realizing them. It was in this dilemma that the idea of celebrating a day or a week came as a gift from....¹⁰ It killed not two but three birds with one stone. We could reconcile ourselves with our conscience which wanted

9. The classification of programmes into “days” or “weeks” is purely arbitrary and makes no difference of substance because the celebration of a week means, in practice, the celebration of the opening day.

10. You may put in “Heaven” or “Hell”, according to your taste.

noble things to be done. We were not required to compromise with either our selfishness or our laziness because we were not required to do anything whatsoever; and, what is most important of all, we could have some fun we so dearly loved. Like all people who have nothing to celebrate, we just love celebrations. So we converted into a “day” or a “week” celebration every noble concept we could not repudiate in theory and did not desire to put into practice. But now the whole programme was different. In this national service programme, all celebrations within the schools were immediately stopped. How can you celebrate a six-month programme for schools except by work? What is even more important, all celebrations outside the schools were also stopped: how can you celebrate anything at all if you cannot conscript students and teachers for processions and meetings? So the era of celebrations came to an end and inevitably gave place to an era of work.

It was the happiest moment in my life when, after reviewing the outstanding results of the six months of a new campaign, I stood up to address a huge gathering of teachers, students, and parents at the Guru-Shishya Leela Grounds in Newer Delhi. My voice was choked with emotion and I just could not say a word, believe me, a man who can hardly ever stop from talking! Fortunately the situation was saved for me because even as I got up, the crowd began a thunderous clapping which went on and on, getting louder and louder. I thus got a breathing space in which I could control my emotions, become normal, and ready to speak. But the clapping would not stop and went on becoming louder still. It almost reached an irritating point when I was bursting to speak, with the pressure of words and ideas mounting up every millionth of a second in my brain. Yet the crowd went on clapping and did not allow me to say a word. The blood of a Dictator boiled up in me and I wanted to shout them down and felt almost choked. But still the clapping went on and on, becoming ever louder and louder. The next thing I knew was that I was feeling suffocated in bed and the alarm clock which I had set up at 5-30 a.m. was ringing my head off and preventing me from sleeping on. I cursed the nuisance and the man who invented the alarm clock; but there it was – my dictatorship had been destroyed for ever.

And how I regret that it was just a dream!

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P.L. Deshpande

Naiksaheb

SIXTEEN OR SEVENTEEN YEARS AGO I was working in the Directorate-General of All India Radio in Delhi. We were discussing in a meeting with the Director-General a series of talks on education for the National Programme. While the names of various educationists of an all-India reputation were being suggested, I made a mention of Mr J.P. Naik. The Director-General, Mr Jagdish Chandra Mathur, an ICS officer and a keen educationist himself, almost jumped from his chair and asked me:

“How do you happen to know Mr Naik?”

“My Guru”, I said.

“Same here”, said Mr Mathur.

The subject for discussion for the next 15 to 20 minutes was J.P. Naik, the man and his mission.

Naiksaheb, as we all affectionately call him though there is nothing of the proverbial “Saheb” in him, was not so widely known in the Delhi official circles then as he now is. Delhi has a habit of knowing people and valuing them by the official posts they hold. Naiksaheb did not hold any such post then. Mr Mathur had to educate the members of that committee on Naiksaheb’s outstanding contribution in the field of education.

“Where is he now?”, asked Mr Mathur.

“That’s one question, Sir, which very few people can answer about Naiksaheb”, I said.

I would rather quote Naiksaheb himself on his “whereabouts”. In a delightful article written for circulation among his friends*Naiksaheb

*This refers to the first article in this volume, “To Begin a Revolution with a Revolution”, written in 1965 when the Education Commission 1964-66, of which Mr Naik was Member-Secretary, was at the height of its glory – and labours. –Ed.

has let out the secret of his “everywhereness” and “nowhereness”, so to say.

I am not, dear Reader, a habitual dreamer. On the other hand, I sleep like a log and either do not dream at all or at least never recollect what I have dreamt, very probably because I do most of my dreaming when awake. (There are, of course, a few friends who assert that I hardly do anything else. But I am afraid they are a little unkind.)

So, there you are. Here is someone who like the seer described in the *Bhagwadgita* is fast asleep seeing dreams while the rest of the world thinks itself to be fully awake. It is a pity that the world does not have enough great dreamers like Naiksaheb who dedicate their lives to convert such wonderful dreams into realities which make life worth living. One has only to be by his side and watch him work. One feels exhausted by the magnitude of it. Yet there is an equal amount of pleasure too. It is like watching a sculptor chiselling out a statue out of hard stone. I believe this is due to a certain breeziness and ease in the manner in which he approaches and tackles the problems that face him. He just loses himself in the tasks on his hands with the ease of an under-water swimmer. And that is where perhaps we lose his track. Many a time I have found during a conversation with him that he was both listening and not listening. I wonder if there are one hundred different refuges in his mind for him to disappear, like the caves of the ancient seers where they could disappear, not as an escape from the world around them but to think with a greater concern on the problems of humanity and try if they could find out solutions for its ills.

Naiksaheb’s inward haunts can be extremely delightful too. One has only to have the good fortune to get an entrance into them along with him. They are not like the protective and lonely caves of the ascetics. They are more in the nature of treasure-houses of gems collected from oceans of literature, from thoughts that have illuminated the human race throughout the ages, and from his own experience, which is much stranger than fiction. Naiksaheb leaves one aghast by his erudition without making one feel that he is a Pandit. He has never indulged in impressing. As in a flower, the fragrance is already there. One should be lucky enough to get a favourable wind and possess a sensitive nose.

Though I would not pride myself on having a very sensitive nose, I can never forget the fortune of the favourable wind, which I had

years ago when my wife Sunita and I were driving with him from Kolhapur to Satara. It is about two hours' drive. During the course of our conversation someone made a reference to Robert Browning. And for the rest of the journey Naiksaheb lifted us and took us round the Browning-land. Line after line from Browning's poems started flowing out of him. It was not merely a feat of memory. It was a regular journey through that land of hope, of love, of sights sometimes full of clear sunshine, at others a little baffling due to the poet's cunningly putting a transparent veil on it and enhancing its mystery. Years have passed since then, but that blissful ride with Naiksaheb taking us round by the hand as it were is still fresh in our memory.

Theatre people, like us, I believe, are a little extrasensitive to the quality of human voice. Voice for us is not a mere vehicle of words. It brings along with it a distinct personality of its own. There is a natural quality of persuasion in Naiksaheb's voice. Even a casual "hello" from him suggests a sincere concern about others. Even when he addresses a crowd, apart from the conviction which he carries about what he says, this endearing quality of his voice makes you want to listen to him all the more. He always makes you feel that he is only helping you discover what is already lying hidden within you. If education attempts to take the students from the known to the unknown, Naiksaheb's teaching amply demonstrates this truth, whether it is a lesson for teachers in a training college; a public meeting, or just an informal conversation with friends. Half an hour with him, and you come out "a chastened man", as an eminent medical expert put it. Apart from his superb intellect and an unusual capacity for work, this rare quality of his silken and persuasive voice also contributes a great deal to this kind of "chastening".

To get back to the Browning story, Naiksaheb's recitation, I must confess, did come to us as a pleasant surprise. We had known Naiksaheb for quite some time but our conversation usually centred round education in general and rural education in particular. Naiksaheb's recitation and the tender discourse on love, with Robert and Elizabeth Browning as the point of take-off, disclosed something within him which was not only unknown to us but was also rather confusing. We realized our folly much later when we remembered that we had left him at the house of Dr (Miss) Chitra Naik who was then Inspector of Schools in Satara and was later to become Dr (Mrs) Chitra Naik. We had totally missed this third dimension, which made Naiksaheb's recitation so pleasing and so much in tune with the great

poet of hope and love. I feel ever grateful to that moment of luck which started the favourable wind. It is like being suddenly exposed to beautiful strands of music, with the experience ever vibrating in your memory.

THIS MENTION OF A MUSICAL EXPERIENCE takes me back to our first meeting. Though I take pride in calling him my Guru, I have never been his student in any of the educational institutions where he taught. I had lost my faith in formal education even while it was forced on me within the four walls of a school or a college. I met Naiksaheb some twenty-five years ago in Kolhapur and that too, of all the places, in a musical soiree. Mr Baburao Joshi, a legal practitioner – most probably by paternal compulsion – and a musician by choice was the common friend and host for the evening. The late Acharya Bhagwat, who was perhaps the dearest friend, philosopher, and guide of Naiksaheb, was also present on that occasion. There was a wonderful fusion of Gandhian selflessness and Tagore's unceasing pursuit of all that was sublime and beautiful in life in the Acharya's personality. For reasons best known to himself, he hid a tender heart under a rough exterior and a sharp tongue to match it. We know each other pretty well, he treating me with great affection and scantiest respect and I always touching his feet in all reverence yet suppressing my irresistible desire to pinch them. He never forgave my wife for marrying a good-for-nothing fellow like me though he had a paternal and immense affection for her. There were a few other friends who had come to listen to music. It was Acharya Bhagwat who introduced me and Sunita to Naiksaheb. The musical recital started and Naiksaheb's face gradually took on a strange resemblance to that of a passenger who realizes that he had boarded the wrong train after it had left the station and gathered speed. Later on I was to realize, with a sense of relief, that the performing arts such as dance, drama, and music were one sphere which had escaped his attention. The performing artistes should be thankful to him for that. He would have otherwise left many of us out of jobs, and made us take shelter under some school or another as schoolmasters which, in spite of Naiksaheb's best efforts, is still in many cases the last resort of the educated, semi-educated, and the maladjusted unemployables in our society.

Since I was not a stranger to Kolhapur, I had heard of Naiksaheb much before I met him, not only as an educationist but also as one

who in the course of official duties as Development Secretary in Kolhapur state had done a great deal to give that ancient town a new and modern look. I knew how he had brought down a number of old houses fully or partially to widen the roads and almost coaxed the simple Kolhapur folk into believing that the new widened roads would even help them widen their outlook. He had established a reputation as a master town-planner, an expert on cooperative marketing of the village produce and had succeeded in creating self-confidence among the farmers in the surrounding rural areas. His “destruction” campaign had earned him an affectionate nickname, *Pādā Pād Mantri* – Minister for Demolition – from the people of Kolhapur who loved him and held him in the highest regard. There was no end to stories and legends about him — such as his filling the pockets of his famous half-pants and half-shirt with baked peanuts and munching them in the street while passing orders to his subordinates to bring down the obstructing houses and such other structures. There was yet another equally popular story about his working round the clock in his office in three shifts with his subordinate staff moving in and moving out according to the schedule and the boss sticking fast to his seat with a cup of tea and a handful of peanuts for his breakfast, and two cups and two handfuls of peanuts for his lunch. He always skipped dinner perhaps, they would say, to keep his waistline intact. It was also strongly rumoured and believed that he used the top of his office table as his bed with a few big size bound volumes of reports on education, agricultural reforms, etc., for his pillow, wound a towel around them for a softer touch, spread the morning newspaper for a bed-sheet – he had a fresh one everyday – and stole a nap or two between the shifts. The towel, people said, was perhaps his only other sartorial possession barring, of course, a pair of half-pants and half-shirts.

In a feudal set-up where officialdom always went with pomp and splendour and corruption of every sort, Naiksaheb’s austere living and extraordinary devotion to the welfare of the people in the exercise of his duties as a government servant was something which the poor state subjects had hardly ever heard of or seen before. Besides Naiksaheb being a Kolhapur man himself, many of them knew about his brilliant career as a student of the Rajaram College. They knew that he had sacrificed a comfortable future either as an ICS officer or a barrister at the altar of Gandhiji’s Satyagraha movement. They were fully aware of the fact that he had insisted on drawing a monthly

salary which was even less than that of a village schoolmaster, when he was entitled to ten times more than what he drew.

When I first met him at that musical session, his career as “Minister for Demolition” was over. But the intensity with which he studied the Kolhapur town and executed the town-planning programme suddenly came to my notice when I found him directing a stranger to a certain house. Naiksaheb was rattling off the various numbers and names of the houses near by with an ease that would have put a postman to shame. It looked as if he knew almost every house in the city and the name of its occupant and perhaps even the number of school-going children playing hide-and-seek with their teachers. It is amazing to witness his total involvement, and total withdrawal too.

I WONDER HOW MANY OF HIS ACQUAINTANCES know that he was probably the first “barefoot doctor” even before Mao proclaimed this idea to the underdeveloped world. He was given a two years’ sentence for participation in the Satyagraha movement in 1931. While he was serving the term in a jail in Karnataka, he noticed that some of the murderers, dacoits, and other convicts serving long-term imprisonments were assigned the duties of male nurses in the jail hospital. Their method of nursing the sick inmates of the jail was not far different from that of the tyrants who once upon a time passed as village schoolmasters and who were more inventive in the methods of punishment than those of education. Naiksaheb, who then was hardly twenty-four, requested the jail superintendent to allow him to nurse the ailing prisoners. He obtained his permission to borrow books on medical science from outside and studied them. After their release, most of the Satyagrahis opted for politics, some of them went back to their professions, and the shrewder among them secured offices of power after Independence. But young Naiksaheb went and settled down in a village in Karnataka and started his one-man free medical centre. It was here that he must have studied in depth not only the physical but the spiritual ailments of the villagers in our country and discovered that the root cause of their malady lay in the lack of education which could liberate them in the true sense of the term. He found an approach through his study of medicine. He went in as a political prisoner to the jail, came out as a doctor of medicine, again went in as a doctor of medicine in villages and emerged as an educationist. As he has no formal degree in medicine, he does not have any in education either. Yet years after he had given up his medical

practice, where he earned nothing except the blessings of the poor patients he treated, he is still well informed about the current developments in medicine. He once had a discussion with my brother-in-law who is an eminent gynaecologist in Bombay. After Naiksaheb left, my brother-in-law casually asked me where "Dr Naik" practised. "Nowhere", I said. He refused to believe that Naiksaheb had no formal education in medicine. "Even many of us who practise medicine are not aware of the latest developments in medical science to which Dr Naik was referring", he said, still insisting on calling him "Dr Naik".

It is said that after seeing the architectural design of "Shyamoli", a cottage built in Shantiniketan by Rabindranath Tagore for Mahatma Gandhi's stay, a world-famous architect had exclaimed: "Thank God, the poet did not practise as a professional architect. He would have left many of us jobless." Naiksaheb's phenomenal grasp of subjects varying from bricklaying to giving discourses on the philosophy of education and the tremendous range of interests he has must have made many an expert repeat what the architect had said. But here, again, one should remember that all the knowledge he has gathered and the deep interest he has taken in all that goes on in life is ultimately meant to serve the sole purpose of his life – peoples' education. I regard him as the real torch-bearer of the fundamental idea of education as spelt out by the two great modern educationists – Tagore and Gandhi. Said Tagore: "The highest education is that which does not merely give us information but makes our life in harmony with all existence."

The growth of schools and colleges in the bigger cities with the English language as the medium of teaching was compared by Tagore with the growth of mushrooms. He uses the Bengali word *byanger chhata* ("frogs' umbrellas"). They bred human frogs in those city ponds, resulting in the creation of a new Indian society which talked like the British but never acted like them. They were severed from their fellow-men rotting in the villages in conditions of ever-growing penury. A few of these newly educated thrived and fattened while millions of their brethren were allowed to decay both physically and mentally. Thus the term "rural" came to be equated with ignorance and backwardness. It was Tagore who drew the attention of the "educated" to this lop-sidedness in Indian society. A country suffering from extra-accumulation of fat on one side and emancipation on the other was doomed to remain paralysed.

It is unfortunate that the anguish of such great minds as Tagore and Gandhi is not shared by most of the "educated" people, who still cherish the most unscientific notions about modernity. Gandhi's concept of Basic Education is perhaps the most revolutionary one in the field of education in modern times. It is, again, a great misfortune that this dynamic concept was choked to death by many of the Mahatma's own followers, who, after his death, tried with their own mediocre intellectual apparatus to imagine how Gandhi would have developed the Basic Education Programme. There is something rather tragi-comic about the way many of them handled this plan and twisted it into a lifeless ritualistic routine. I sometimes wonder how every dynamic philosophy in our country so easily gets itself transformed into a moribund ritual.

However, with his extraordinary intellectual calibre and first-hand knowledge of conditions in the rural areas, Naiksaheb succeeded in winning over educationists of international repute to the philosophy of Basic Education and its adaptability to differing conditions in different parts of the world. He could do this mainly because he refused to accept the ritualism which had entered into the minds and life-style of the Gandhians. Naiksaheb lives simply, dresses simply, and eats simple food. Yet he has never made a fetish of it. Even simplicity if it amounts to a ritual would sound odd to him. A ritual has its own appeal so long as the spirit behind it is alive. The moment the dynamic spirit, which is always in search of fresh ideas and plans of work, fades away, the ritual loses its impact and becomes a lifeless activity generating nothing. I have come across quite a few Gandhians who were never able to lift their heads above such daily ritualistic trifles. They refused to see the manifoldness of life. I have seen Naiksaheb move with complete ease in many different situations in life without compromising any of his principles. Wherever he has been, he has helped in lightening other peoples' burden and taken care not to be a burden to them by making any kind of demands to inflate his ego.

I HAVE SEEN HIM TOTALLY ENGROSSED in his work in the most uncomfortable surroundings. Once, while he was busy writing the history of the Department of Education of the old Bombay state during its centenary year, I came to know that Naiksaheb had come to Poona to go through some old office records. I was shocked to know that he had put up at a hotel called the Badshahi Boarding House. (One should not be misled by the word "Badshahi". Poona has

its own connotation for certain words and “Badshahi” is one of them.) The room he occupied had hardly anything Badshahi or royal about it. It was cramped with three cots and a chair or two for the visitors. A naked bulb hung from the ceiling threw light on the disorder that reigned supreme in that “royal” parlour. Naiksaheb was sitting cross-legged on one of the cots. The other two were occupied by a wholesale onion merchant and a junior PWD supervisor on transfer. The onion merchant had brought samples of his merchandise as was easily seen from the onion peels scattered all over. The supervisor was supervising trunks, beddings, boxes of various shapes and sizes and such other domestic property. There was hardly any room left for a visitor. Naiksaheb’s cot was laden with files and records and other source material for the history of the Department of Education, a chapter of which he was dictating to a stenographer who had occupied one of the two chairs and was using his own lap as a substitute for a desk. The room smelt of smoke emitted by the railway steam engines. Street noises made any conversation impossible. To add to the din, there was an intermittent puffing and panting of those engines and outbreaks of shrill whistles which suggested anything from sheer joy to utter helplessness. An old fan added more noise than breeze to the atmosphere.

Unmindful of all this, Naiksaheb was giving the dictation. After a while he asked the stenographer to get it typed and send the other stenographer for further dictation. He had a severe cold and was coughing constantly. He told us some of the very interesting episodes he had come across while going through those records. I still remember the harrowing tales he narrated about the tortures suffered by the poor young Brahmin widows who had found shelter in Mahatma Jtirao Phule’s school for girls. They were found in classroom compositions written by these unfortunate young women.

NAIKSAHEB HAS AN ENORMOUS FUND OF STORIES and anecdotes. Most of them are from his personal experience. I wish he would write them out, especially the humorous ones. We were once sitting with him listening to such small titbits till past midnight and rolling with laughter. That was the time when Sunita and I had decided to join him in a rural educational project in Malegaon in the Nasik district. The late Bhausaheb Hiray who was then Minister for Revenue in the Bombay state had started a pretty big rural education centre called Mahatma Gandhi Vidya Mandir. I used to teach in a college in

Bombay and Sunita in a high school in those days. Both of us left our jobs and joined this institution. Our visits to the Mouni Vidyapeeth at Gargoti, of which Naiksaheb was the main architect, had already converted us to his philosophy of education in the rural areas. We could meet Naiksaheb more often and watch him work from close quarters. There used to be endless discussions with architects, engineers, educationists, government officials; plans of various kinds were being prepared. There was no end to Naiksaheb’s trips from Gargoti to Malegaon, to Bombay, to Delhi. He would suddenly make his appearance at an odd hour of the day, with papers and files bundled in a bath towel under his arm. It could as well be at the dead of night. Naikshaeb blissfully unaware of the unearthly hour would pick up the thread from where he had left it during his last visit and start discussing the progress of the work, the difficulties encountered by us, and other matters relating to the project. (More than myself, Sunita had taken a deeper plunge into the project, though I am not averse to hard work so long as it does not involve me in mathematical calculations, drafting of constitutions, checking bills, etc.) Naiksaheb would even remember the measurements of the plinth level of some of the buildings that were coming up on the campus. In between the discussions Sunita would rush to our room which in fact was a fairly spacious yet unused bathroom in the new school building – and cook some food for him. I would quietly sneak out with Acharya Bhagwat and listen to his discourse on the stars in the midnight sky.

After finishing the work and whatever little food Sunita could offer him he would recline and before one could say Alexander he was fast asleep. Next morning he would jump into a jeep and proceed onwards. Sunita used to keep a pair of neatly washed and pressed half-pants and a half-shirt for him to change. That was his life-style, which we all admired, liked, and even made a little fun of.

UNFORTUNATELY THE MALEGAON EXPERIMENT FAILED to take shape on the lines on which it was planned out. I went to the world of performing arts, where angels like Naiksaheb fear to tread and our meetings became very infrequent. Years after that I met him in Delhi. He was an important man in Delhi, now that he was holding an important post in the Ministry of Education. Naiksaheb invited me to dinner and even suggested that we meet at eight in the evening. I was not exactly happy to find Naiksaheb getting into the formal ways and etiquette of the Delhiwallahs and inviting me to dinner and to add

insult to injury even suggesting the time of the dinner. Punctuality, I knew, had never been his strong point.

I went to the address he had given me at the appointed hour. It was raining cats and dogs and I had to wade my way through knee-deep water to get into the building after getting out of the taxi. It was quite a huge building and a floor or two, I thought, were used as hostels. Someone guided me to Naiksaheb's room. And there he was sitting on a cot with files and piles of books around, and a junior officer helped me take a few away from the chair where Naiksaheb asked me to sit and relax till he finished a little business with that officer. But for the din and noise and the onion merchant, things were not much different from the Badshahi Boarding House. I heaved a sigh of relief for one reason and the junior officer, who was asked to meet him the next morning and dispatched, for another. We sat chatting for a good half an hour and to my great surprise, entered Chitratai from the adjoining room. Naiksaheb had totally forgotten to mention that she was in town. She too joined us in the conversation. Another half an hour and no dinner announced. It was getting near ten and I do not know if I showed some signs of hunger on my face but Chitratai suddenly asked me if I had had my dinner. "Naiksaheb had invited me here for one...," I said, and poor Chitratai almost rushed out to find if anything was left in the hostel canteen. I was more than filled from within to find that Delhi had failed to corrupt Naiksaheb. It should have been the most unusual experience for "the man who came to dinner" in any one of the houses in Delhi – the host finishing his dinner before the arrival of the guest, the hostess being kept completely in the dark about his arrival, and the poor guest waiting to share pot-luck with the canteen cook. Yet it was such a great relief to discover that Delhi had failed to change this man who lived in one of the most formal cities and refused to surrender his non-formality. Even Chitratai, an eminent educationist herself, seems to have failed to educate her husband on "How to invite friends to dinner and to remember it".

SUNITA AND I WERE AMONG THAT SMALL GROUP of Naiksaheb's friends who attended his wedding. It was a beautiful wedding in the lovely natural surroundings of the Panhala Fort. Among others, his life-long friend and close associate in the Indian Institute of Education, the late Rambhau Parulekar was present to give his blessings to the couple. In spite of his old age, Rambhau had never lost his impish sense of humour. He took me aside and closing his eyelids – a

characteristic gesture of his whenever he was up to making some mischievous remark – whispered in my ears:

"Do you know, P.L., J.P. and I have been very close friends for a number of years."

"I know that, Rambhau; he has a great regard for you."

"Not as much as he has for Chitra. Mind you, he has been never so punctual with me. This is the first time I see him arrive on time and more so at the destination where we all have been expecting him to arrive."

Old Rambhau is no more with us, but he is one person whom we will all miss on Naiksaheb's 70th birthday celebration. And the other one is the late Acharya Bhagwat. But there are hundreds who will be wishing Naiksaheb a long and a happy life. One is surprised to find how from some unexpected corners one gets a spontaneous response to the very mention of Naiksaheb's name. At an international seminar in Vienna in 1974, I presented a paper on "The Impact of Modern Music on Youth in Rural Areas in India". During the course of the discussion that followed I referred to some observations made by Naiksaheb. I was sitting next to a Malaysian-Chinese dignitary from UNESCO. He turned to me and told me that he knew J.P. very well.

"And how's that?", I asked him.

"My Guru", he said.

An eminent thinker like Gunnar Myrdal quotes Naiksaheb profusely in his book, *The Asian Drama*. He has been rightly described as the educator of educators. He is honoured, respected, and invited for consultations and advice by countries all over the world. He once suddenly dawned before us in the lounge of the famous Dai-Ichi Hotel in Tokyo.

"What brings you here?", he asked me.

"The Japanese Kabuki, the Nov —"

"And the cherry blossom", said my wife.

"And you, Naiksaheb?"

"The primary education of the Japanese people", Naiksaheb said.

A couple of Japanese had already started bending and unbending before him and off he went with them for a meeting with the Japanese educationists.

Dai-Ichi is a five-star hotel. It was pretty cold even inside the lounge. Naiksaheb was wearing a khadi *achkan* and *chudidar* but the scarf which he wound round his head and chin to protect his ears from the chill outside was absolutely in the style of a villager out to sell

fresh vegetables in the early hours of the day in the weekly bazar of a town near by.

He has always carried within him that tiny little village Bahirewadi, where he was born 70 years ago. Here is a man who has always been up to date in his information, most modern in his ideas, contemporary in his attitude towards life, yet no power on earth has been able to sever him from his roots in rural India.

It was Gandhi who said that every project which men in authority undertook should have one basic thought behind it, viz. the betterment of the poor man's life in our country. And the only person who has become "powerful by knowledge" and attained fulness by sympathy whom I have had the good fortune of knowing is Naiksaheb. He is the one who, to quote the poet again, has realized as a teacher of teachers that "we rob the child of his earth to teach him geography, of language to teach him grammar".

It is really a very happy coincidence that Naiksaheb should have made his first appearance in the world in a small remote village on 5 September, which is celebrated as the Teachers' Day in our country. His mission in life even at the age of 70 seems to me to see that in a country like ours, where the bulk of the population lives in the villages, every day should look like the Teachers' Day, with every villager fired by the desire to learn and every teacher yearning to teach.

His favourite poet Browning has, I am sure, given him a *mantra* as it were of six immortal words: "The best is yet to be." "Age cannot wither, not custom stale" the incorrigible optimist that Naiksaheb is.

Ivan Illich

The Alternative to Schooling

FOR GENERATIONS WE HAVE TRIED to make the world a better place by providing more and more schooling, but so far the endeavour has failed. What we have learnt instead is that forcing all children to climb an open-ended educational ladder cannot enhance equality but must favour the individual who starts out earlier, healthier, or better prepared; that enforced instruction deadens for most people the will for independent learning; and that knowledge treated as a commodity, delivered in packages, and accepted as private property once it is acquired, must always be scarce.

People have suddenly become aware that the endeavour of public education by means of compulsory schooling has lost its social, its pedagogical, and its economic legitimacy. In response, critics of the educational system are now proposing strong and unorthodox remedies that range from the voucher plan, which would enable each person to buy the education of his choice on an open market, to shifting the responsibility for education from the school to the media and to apprenticeship on the job. Some individuals foresee that the school will have to be disestablished just as the church was disestablished all over the world during the last two centuries. Other reformers propose to replace the universal school with various new systems that would, they claim, better prepare everybody for life in modern society. These proposals for new educational institutions fall into three broad categories; the reformation of the classroom within the school system; the dispersal of free classrooms throughout society; and the transformation of all society into one huge classroom. But these three approaches – reformed classroom, the free classroom, and the worldwide classroom – represent three stages in a proposed escalation of education in which each step threatens more subtle and more pervasive control than the one it replaces.

I believe that the disestablishment of the school has become inevitable and that this end of an illusion should fill us with hope. But I also believe that the end of the "age of schooling" could usher in the epoch of the global schoolhouse that would be distinguishable only in name from a global madhouse or global prison in which education, correction, and adjustment become synonymous. I therefore believe that the breakdown of the school forces us to look beyond its imminent demise and to face fundamental alternatives in education. Either we can work for fearsome and new educational devices that teach about a world which progressively becomes more opaque and forbidding for man, or we can set the conditions for a new era in which technology would be used to make society more simple and transparent, so that all men can once again know the facts and use the tools that shape their lives. In short, we can disestablish schools or we can deschool culture.

The Hidden Curriculum of Schools

IN ORDER TO SEE CLEARLY THE ALTERNATIVES we face, we must first distinguish learning from schooling, which means separating the humanistic goal of the teacher from the impact of the invariant structure of the school. This hidden structure constitutes a course of instruction that stays forever beyond the control of the teacher or of his school board. It conveys indelibly the message that only through schooling can an individual prepare himself for adulthood in society, and that what is learned outside of school is not worth knowing. I call it the hidden curriculum of schooling because it constitutes the unalterable framework of the system, within which all changes in the curriculum are made.

The hidden curriculum is always the same regardless of school or place. It requires all children of a certain age to assemble in groups of about thirty, under the authority of a certified teacher, for some 500 or 1,000 or more hours per year. It does not matter whether the curriculum is designed to teach the principles of Fascism, liberalism, Catholicism, socialism, or liberation, so long as the institution claims the authority to define which activities are legitimate "education". It does not matter whether the purpose of the school is to produce Soviet or United States citizens, mechanics, or doctors as long as you cannot be a legitimate citizen or doctor *unless* you are a graduate. It makes no difference whether all meetings occur in the same place so long as they are somehow understood as attendance: Cane-cutting is work

for cane-cutters, correction for prisoners, and part of the curriculum for students.

What is important in the hidden curriculum is that students learn that education is valuable when it is acquired in the school through a graded process of consumption; that the degree of success the individual will enjoy in society depends on the amount of learning he consumes; and that learning *about* the world is more valuable than learning *from* the world. The imposition of *this* hidden curriculum within an educational programme distinguishes schooling from other forms of planned education. All the world's school systems have common characteristics in relation to their institutional output, and these are the result of the common hidden curriculum of all schools.

It must be clearly understood that the hidden curriculum of schools translates learning from an activity into a commodity for which the school monopolizes the market. The name we now give to this commodity is "education", a quantifiable and cumulative output of a professionally designed institution called school, whose value can be measured by the duration and the costliness of the application of a process (the hidden curriculum) to the student. The graduate from the neighbourhood college and the one from the Ivy League might have both acquired 135 credits in four years, but they are fully aware of the differential value of their stock.

In all "schooled" countries knowledge is regarded as the first necessity for survival, but also as a form of currency more liquid than roubles or dollars. We have become accustomed, through Karl Marx's writings, to speak about the alienation of the worker from his work in a class society. We must now recognize the estrangement of man from his learning when it becomes the product of a service profession and he becomes the consumer.

The more education an individual consumes, the more "knowledge stock" he acquires, and the higher he rises in the hierarchy of knowledge capitalists. Education thus defines a new class structure for society within which the large consumers of knowledge – those who have acquired large quantities of knowledge stock – can claim to be of superior value to society. They represent gilded securities in a society's portfolio of human capital, and access to the more powerful or scarce tools of production is reserved for them.

The hidden curriculum thus both defines and measures what education is, and to what level of productivity it entitles the consumer. It serves as a rationale for the growing correlation between jobs and

corresponding privilege: which can translate into personal income in some societies, and direct claim to time-saving services, further education, and prestige in others. (This point is especially important in the light of the lack of correspondence between schooling and occupational competence established in studies as Ivar Berg's *Education and Jobs: The Great Training Robbery*.)

THE ENDEAVOUR TO PUT ALL MEN through successive stages of enlightenment is rooted deeply in alchemy, the Great Art of the waning Middle Ages. John Amos Comenius, a Moravian bishop, self-styled Pansophist, and pedagogue, is rightly considered one of the founders of modern schools. He was among the first to propose seven or twelve grades of compulsory learning. In his *Magna Didactica*, he described schools as devices to "teach everybody everything" and outlined a blueprint for the assembly-line production of knowledge, which according to his method would make education cheaper and better and make growth into full humanity possible for all. But Comenius was not only an early efficiency expert. He was an alchemist who adopted the technical language of his craft to describe the art of rearing children. The alchemist sought to refine base elements by leading their distilled spirits through twelve stages of successive enlightenment, so that for their own and all the world's benefit they might be transmuted into gold. Of course, alchemists failed no matter how often they tried, but each time their "science" yielded new reasons for their failure, and they tried again.

Pedagogy opened a new chapter in the history of *Ars Magna*. Education became the search for an alchemic process that would bring forth a new type of man, who would fit into an environment created by scientific magic. But no matter how much each generation spent on its schools, it always turned out that the majority of people were unfit for enlightenment by this process and had to be discarded as unprepared for life in a man-made world.

Educational reformers who accept the idea that schools have failed fall into three groups. The most respectable are certainly the great masters of alchemy who promise better schools. The most seductive are popular magicians who promise to make every kitchen into an alchemic lab. The most sinister are the new Masons of the Universe who want to transform the entire world into one huge temple of learning.

Notable among today's masters of alchemy are certain research

directors employed or sponsored by the large foundations who believe that schools, if they could somehow be improved, could also become economically more feasible than those that are now in trouble, and simultaneously could sell a large package of services. Those who are concerned mainly with the curriculum claim that it is outdated or irrelevant. So the curriculum is filled with new packaged courses on African Culture, North American Imperialism, Women's Lib, Pollution, or the Consumer Society. Passive learning is wrong – it is indeed – so we graciously allow students to decide what and how they want to be taught. Schools are prison houses. Therefore principals are authorized to approve teachouts, moving the school desks to a roped-off Harlem street. Sensitivity-training becomes fashionable. So we import group therapy into the classroom. School, which was supposed to teach everybody everything, now becomes all things to all children.

Other critics emphasize that schools make inefficient use of modern science. Some would administer drugs to make it easier for the instructor to change the child's behaviour. Others would transform school into a stadium for educational gaming. Still others would electrify the classroom. If they are simplistic disciples of McLuhan, they replace blackboards and textbooks with multimedia happenings; if they follow Skinner, they claim to be able to modify behaviour more efficiently than old-fashioned classroom practitioners can.

Most of these changes have, of course, some good effects. The experimental schools have fewer truants. Parents do have a greater feeling of participation in a decentralized district. Pupils, assigned by their teacher to an apprenticeship, do often turn out more competent than those who stay in the classroom. Some children do improve their knowledge of Spanish in the language lab because they prefer playing with the knobs of a tape-recorder to conversation with their Puerto Rican peers. Yet all these improvements operate within predictably narrow limits, since they leave the hidden curriculum of school intact.

Some reformers would like to shake loose from the hidden curriculum of public schools, but they rarely succeed. Free schools that lead to further free schools produce a mirage of freedom, even though the chain of attendance is often interrupted by long stretches of loafing. Attendance through seduction inculcates the need for educational treatment more persuasively than the reluctant attendance enforced by a truant officer. Permissive teachers in a padded classroom can easily render their pupils impotent to survive once they leave.

Learning in these schools often remains nothing more than the acquisition of socially valued skills defined, in this instance, by the consensus of a commune rather than by the decree of a school board. New presbyter is but old priest writ large.

Free schools, to be truly free, must meet two conditions: first, they must be run in a way to prevent the reintroduction of the hidden curriculum of graded attendance and certified students studying at the feet of certified teachers. And more importantly, they must provide a framework in which all participants, staff and pupils, can free themselves from the hidden foundations of a schooled society. The first condition is frequently stated in the aims of a free school. The second condition is only rarely recognized and is difficult to state as the goal of a free school.

The Hidden Assumptions of Education

IT IS USEFUL TO DISTINGUISH between the hidden curriculum, which I have described, and the occult foundations of schooling. The hidden curriculum is a ritual that can be considered the official initiation into modern society, institutionally established through the school. It is the purpose of this ritual to hide from its participants the contradictions between the myth of an egalitarian society and the class-conscious reality it certifies. Once they are recognized as such, rituals lose their power, and this is what is now beginning to happen to schooling. But there are certain fundamental assumptions about growing up – the occult foundations – which now find their expression in the ceremonial of schooling, and which could easily be reinforced by what free schools do.

At first sight, any generalization about free schools seems rash. Especially in the United States, in Canada, and in Germany since 1970 they have been the thousand flowers of a new spring.* But on those experimental enterprises which claim to be *educational institutions* generalizations can be made. But first we must gain some deeper insight into the relationship between schooling and education.

*For the theoretical elaboration of this point, see Wolfgang Sachs, *Schulzwang und soziale Kontrolle: Argumente fuer eine Entschulung des Lernens*, Verl. Moritz Diesterweg, Frankfurt, 1976.

For a guide to the literature that is critical of "education", however free, see Ronald Gross, *The Lifelong Learner: A Guide to Self-development*, Simon and Schuster, New York, 1977.

We often forget that the word "education" is of recent coinage. It was unknown before the Reformation. Education of children is first mentioned in French in a document of 1498. This was the year when Erasmus settled in Oxford, when Savonarola was burnt at the stake in Florence, and when Durer etched his Apocalypse, which speaks to us powerfully about the sense of doom hanging over the end of the Middle Ages. In the English language the word "education" first appeared in 1530. This was the year when Henry VIII divorced Catherine of Aragon and when the Lutheran Church separated from Rome at the Diet of Augsburg. In Spanish lands another century passed before the word and idea of education became known. In 1632 Lope de Vega still refers to education as a novelty. That year the University of San Marcos in Lima celebrated its sixtieth anniversary. Learning centres did exist before the term "education" entered common parlance. You "read" the classics or the law; you were not educated for life.

During the sixteenth century the universal need for "justification" was at the core of theological disputes. It rationalized politics and served as a pretext for large-scale slaughter. The Church split, and it became possible to hold widely divergent opinions of the degree to which all men were born sinful and corrupt and predestined. But by the early seventeenth century a new consensus began to arise: the idea that man was born incompetent for society unless he were provided with "education". Education came to mean the inverse of vital competence. It came to mean a process rather than the plain knowledge of the facts and abilities in the use of tools which shape a concrete man's life. Education came to mean an intangible commodity which had to be produced for the benefit of all, and imparted to them in the manner in which the visible Church formerly imparted invisible grace. Justification in the face of society became the first necessity for a man born in original stupidity, analogous to original sin.

Schooling and "education" are related to each other like Church and religion or, in more general terms, like ritual and myth. The ritual creates and sustains the myth; it is mytho-poetic, and the myth generates the curriculum through which it is perpetuated. "Education" as the designation for an all-embracing category of social justification is an idea for which we cannot find (outside Christian theology) a specific analogue in other cultures. And the production of "education" through the process of schooling sets schools apart from other institutions for learning which existed in other epochs. This point must

be understood if we want to clarify the shortcomings of *most* free, unstructured, or independent "schools".

To go beyond the simple reform of the classroom, a free school must avoid incorporating the hidden curriculum of schooling which I have described above. An ideal free school tries to provide education and at the same time tries to prevent that education from being used to establish or justify a class structure, from becoming a rationale for measuring the pupil against some abstract scale and from repressing, controlling, and cutting him down to size. But as long as the free school tries to provide "general education", it cannot move beyond the hidden assumptions of school.

Among these assumptions is what Peter Schrag calls the "immigration syndrome", which impels us to treat all people as if they were newcomers who must go through a naturalization process. Only certified consumers of knowledge are admitted to citizenship. Men are not born equal but are made equal through gestation by Alma Mater.

Another assumption is that man is born immature and must "mature" before he can fit into civilized society. This assumption is, of course, contrary to the belief that man is that mammal for whom evolution has selected for his private parents the traits of lifelong immaturity, which constitutes his peculiar "grace". Consistent with this ideological fixation on maturity, man must be guided away from his natural environment and pass through a social womb in which he hardens sufficiently to fit into everyday life. Free schools can perform this function often better than schools of a less seductive kind.

Free educational establishments share with less free establishments another characteristic. They depersonalize the responsibility for "education". They place an institution *in loco parentis*. They perpetuate the idea that "teaching", if done outside the family, ought to be done by an agency, for which the individual teacher is but an agent. In a schooled society even the family is reduced to an "agency of acculturation". Educational agencies which employ teachers to perform the corporate intent of their board are instruments for the depersonalization of intimate relations.

Of course, many free schools do function without accredited teachers. By doing so they represent a serious threat to the established teachers' unions. But they do not represent a threat to the professional structure of society. A school in which the board chooses and appoints people of its own choice to carry out its educational

endeavour even though they hold no professional certificate, licence, or union card is not thereby challenging the legitimacy of the teaching profession any more than a madam, operating in a country which for *legal* operation demands a police licence, challenges the social *legitimacy* of the oldest profession by running a private house.

Most teachers who teach in free schools have no opportunity to teach in their own name. They carry out the corporate task of teaching in the name of a board, the less transparent function of teaching in the name of their pupils, or the more mystical function of teaching in the name of "society" at large. The best proof of this is that most teachers in free schools spend even more time than their professional colleagues planning with a committee how the school should educate. Faced with the evidence of their illusion, the length of committee meetings drives many generous teachers from public into free school and after one year beyond it.

The rhetoric of all educational establishments states that they form men for something, for the future, but they do not release them for this task before they have developed a high level of tolerance to the ways of their elders: education *for* life rather than *in* everyday life. Few free schools can avoid doing precisely this. Nevertheless they are among the most important centres from which a new life-style radiates, not because of the effect their graduates will have but, rather, because elders who choose to bring up their children without the benefit of properly ordained teachers frequently belong to a radical minority and because their preoccupation with the rearing of their children sustains them in their new style.

The Hidden Hand in an Educational Market

THE MOST DANGEROUS CATEGORY OF EDUCATIONAL REFORMER is the one who argues that knowledge can be produced and sold much more effectively on an open market than on one controlled by the school. These people argue that skills can be easily acquired from skill models if the learner is truly interested in the acquisition, that individual entitlements can provide a more equal purchasing power for education. They demand a careful separation of the process by which it is measured and certified. These seem to me obvious statements. But it would be a fallacy to believe that the establishment of a free market for knowledge would constitute a radical alternative in education.

The establishment of a free market would indeed abolish what I have previously called the hidden curriculum of present schooling – its

age-specific attendance at a graded curriculum. Equally, a free market would at first give the appearance of counteracting what I have called the occult foundations of a schooled society – the “immigration syndrome”, the institutional monopoly of teaching, and the ritual of linear initiation. But at the same time a free market in education would provide the alchemist with innumerable hidden hands to fit each man into the multiple, tight little niches a more complex technocracy can provide.

Many decades of reliance on schooling has turned knowledge into a commodity, a marketable staple of a special kind. Knowledge is now regarded simultaneously as a first necessity and also as society’s most precious currency. (The transformation of knowledge into a commodity is reflected in a corresponding transformation of language. Words that formerly functioned as verbs are becoming nouns that designate possessions. Until recently dwelling and learning and healing designated activities. They are now usually conceived as commodities or services to be delivered. We talk about the manufacture of housing or the delivery of medical care. Men are no longer regarded as fit to heal or house themselves. In such a society people come to believe that professional services are more valuable than personal care. Instead of learning how to nurse a grandmother, the teenager learns to picket the hospital that does not admit her.) This attitude could easily survive the disestablishment of school, just as affiliation with a church remained a condition for office long after the adoption of the First Amendment. It is even more evident that test batteries measuring complex knowledge-packages could easily survive the disestablishment of school – and with this would go the compulsion to oblige everybody to acquire a minimum package in the knowledge stock. The scientific measurement of each man’s worth and the alchemic dream of each man’s “educability to his full humanity” would finally coincide. Under the appearance of a “free” market, the global village would turn into an environmental womb where pedagogic therapists control the complex navel by which each man is nourished.

At present schools limit the teacher’s competence to the classroom. They prevent him from claiming man’s whole life as his domain. The demise of school will remove this restriction and give a semblance of legitimacy to the life-long pedagogical invasion of everybody’s privacy. It will open the way for a scramble for “knowledge” on a free market, which would lead us towards the paradox of a vulgar, albeit seemingly egalitarian, meritocracy.

Schools are by no means the only or most efficient institutions, which pretend to translate information, understanding, and wisdom into behavioural traits the measurement of which is the key to prestige and power. Nor are schools the first institutions used to convert education into an entitlement. The Chinese mandarin system, for example, was for centuries a stable and effective incentive for education in the service of a relatively open class whose privilege depended on the acquisition of measurable knowledge.

About 2200 B.C. the emperor of China is said to have examined his officials every third year. After three examinations, he either promoted them or dismissed them for ever from the service. A thousand years later, in 1115 B.C. the first Chan emperor established formal general tests for office: music, archery, horsemanship, writing, and arithmetic. Testees presented themselves every third year for competition with their peers, rather than submitting to measurement by some abstract standards developed by scientists. One in every hundred was promoted through the three degrees of “budding genius”, “promoted scholar”, and into the level of those “ready for office”. The selective ratio of the exams to the three successive levels was so small that the tests themselves would not have had to be very accurate to be useful. Yet, utmost care was taken to insure objectivity. On the second level, where composition was important, the competitor’s test was copied by a secretary and this copy submitted to a jury to avoid the possibility of the author’s calligraphy being recognized and leading the judges to act with prejudice.

In China promotion to a scholarly rank did not provide entitlement to any of the coveted jobs, but it did provide a ticket for a public lottery at which offices were distributed by lot among the certified mandarins. No schools, much less universities, developed in China until she had to begin waging war with European powers. Testing of independently acquired measurable knowledge enabled the Chinese empire during 3,000 years, alone among nation states in having neither true church nor school system, to select its governing elite without establishing a large hereditary aristocracy. Access to it was open to the emperor’s family and to those who passed tests.

Voltaire and his contemporaries praised the Chinese system of promotion through proven learning. Civil Service Testing was introduced in France in 1791, only to be abolished by Napoleon. It would be fascinating to speculate on what would have happened had the mandarin system been chosen to propagate the ideals of the

French Revolution, instead of the school system which inevitably supports nationalism and military discipline. As it happens, Napoleon strengthened the polytechnic, residential school. The Jesuit model of ritual, sequential promotion in a cloistered pedigree prevailed over the mandarin system as the preferred method by which Western societies give legitimacy to their elites.

Principals became the abbots in a world-wide chain of monasteries in which everybody is busy accumulating the knowledge necessary to enter the constantly obsolescent heaven on earth. Just as the Calvinists disestablished monasteries only to turn all of Geneva into one, so we must fear that the disestablishment of school may bring forth a world-wide factory for knowledge. Unless the concept of learning or knowledge is transformed, the disestablishment of school will lead to a wedding between the mandarin system which separates learning from certification and a society committed to provide therapy for each man until he be ripe for the gilded age.

Neither Alchemy nor Magics nor Masonry can solve the problem of the present crisis "in education". The de-schooling of our world-view demands that we recognize the illegitimate and religious nature of the educational enterprise itself. Its hubris lies in the attempt to make man a social being as the result of his treatment in an engineered process. For those who subscribe to the technocratic ethos, whatever is technically possible must be made available at least to a few whether or not they want it. Neither the privation nor the frustration of the majority counts. If cobalt treatment is possible, then the city of Tegucigalpa needs one apparatus in each of its two major hospitals, at a cost that would free an important part of the population of Honduras from parasites. If supersonic speeds are possible, then it must speed the travel of some. If the flight to Mars can be conceived, then a rationale must be found to make it appear a necessity. In the technocratic ethos poverty is modernized: not only are old alternatives closed off by new monopolies, but the lack of necessities is also compounded by a growing spread between those services that are technologically feasible and those that are in fact available to the majority.

A teacher turns "educator" when he adopts this technocratic ethos. He then acts as if education were a technological enterprise designed to make man fit into whatever environment the "progress" of science creates. He seems blind to the evidence that constant obsolescence of all commodities comes at a high price: the mounting cost of training

people to know about them. He seems to forget that the rising cost of tools is purchased at a high price in education: they decrease the labour intensity of the economy, make learning on the job impossible, or at best a privilege of a few. All over the world the cost of educating men for society rises faster than the productivity of the entire economy, and fewer people have a sense of intelligent participation in the commonweal.

The Contradiction of Schools as Tools of Technocratic Progress

EDUCATION FOR A CONSUMER SOCIETY is equivalent to consumer training. The reform of the classroom, the disposal of the classroom, and the diffusion of the classroom are different ways of shaping consumers of obsolescent commodities. The survival of a society in which technocracies can constantly re-define human happiness as the consumption of their latest product depends on educational institutions (from schools to ads) which translate education into social control.

In rich countries such as the USA, Canada, or the USSR, huge investments in schooling make the institutional contradictions of technocratic progress very evident. In these countries the ideological defence of unlimited progress rests on the claim that the equalizing effects of open-ended schooling can counteract the disequalizing force of constant obsolescence. The legitimacy of industrial society itself comes to depend on the credibility of school, and it does not matter if the GOP or the Communist Party is in power. Under these circumstances the public is avid for books like Charles Silberman's report to the Carnegie Commission, published as *Crisis in the Classroom*. Such research inspires confidence because of its well-documented indictment of the present school, in the light of which the insignificant attempts to save the system by manicuring its most obvious faults can create a new wave of futile expectations.

Further investments in school everywhere render the futility of schooling monumental. Paradoxically, the poor are the first victims of more school. The Wright Commission in Ontario had to report to its government sponsors that post-secondary education is inevitably and without remedy taxing the poor disproportionately for an education which will always be enjoyed mainly by the rich.

Experience confirms these warnings. For several decades a quota system in the USSR favoured the admission of sons of working parents over sons of university graduates to the university.

Nevertheless, the latter are over-represented in Russian graduating classes much more than they are in the USA.

On 8 March 1971, Chief Justice Warren E. Burger delivered the unanimous opinion of the court in the case of *Griggs et al. vs. Duke Power Company*. Interpreting the intent of Congress in the equal opportunities section of the 1964 Civil Rights Act, the Burger Court ruled that any school degree or any test given prospective employees must "measure the man for the job" and not the "man in the abstract". The burden of proving that educational requirements are a "reasonable measure of job performance" rests with the employer. In this decision, the court ruled only on tests and diplomas as means of racial discrimination, but the logic of the Chief Justice's argument applies to any use of educational pedigree as a prerequisite for employment. "The Great Training Robbery" so effectively exposed by Ivar Berg must now face challenge from a congeries of bed-fellows, of pupils, employers, and taxpayers.

In poor countries, schools rationalize the economic lag of an entire nation. The majority of citizens are excluded from the scarce modern means of production and consumption, but long to enter the economy by way of the school door. The legitimization of hierarchical distribution of privilege and power has shifted from lineage, inheritance, the favour of king or Pope, and ruthlessness on the market or on the battlefield to a more subtle form of capitalism: the hierarchical but liberal institution of compulsory schooling, which permits the well-schooled to impute guilt to the lagging consumer of knowledge for holding a certificate of lower denomination. Yet this rationalization of inequality can never square with the facts, and populist regimes find it increasingly difficult to hide the conflict between rhetoric and reality.

For ten years Castro's Cuba has devoted great energies to rapid-growth popular education, relying on available manpower, without the usual respect for professional credentials. The initial spectacular successes of this campaign, especially in diminishing illiteracy, have been cited as evidence for the claim that the slow growth rate of other Latin American school systems is due to corruption, militarism, and a capitalist market economy. Yet, now the logic of hierarchical schooling is catching up to Fidel and his attempt to school-produce the New Man. Even when students spend half the year in the cane fields and fully subscribe to the egalitarian ideals of *compañero* Fidel, the school trains every year a crop of self-conscious knowledge-

consumers ready to move on to new levels of consumption. Also Dr Castro faces evidence that the school system will never turn out enough certified technical manpower. Those licensed graduates who do get the new jobs destroy by their conservatism the results obtained by non-certified cadres who muddled into their positions through on-the-job training. Teachers simply cannot be blamed for the failures of a revolutionary government which insists on the institutional capitalization of manpower through a hidden curriculum guaranteed to produce a universal bourgeoisie.

Recovery of Responsibility for Teaching and Learning

A REVOLUTION AGAINST THOSE FORMS OF PRIVILEGE and power which are based on claims to professional knowledge must start with a transformation of consciousness about the nature of learning. Knowledge can be defined as a commodity only as long as it is viewed as the result of institutional enterprise or as the fulfilment of institutional objectives. Only when a man recovers the sense of personal responsibility for what he learns and teaches can this spell be broken and the alienation of learning from living be overcome.

The recovery of the power to learn or to teach means that the teacher who takes the risk of interfering in somebody else's affairs also assumes responsibility for the results. Similarly, the student who exposes himself to the influence of a teacher must take responsibility for his own education. For such purposes educational institutions – if they are needed at all – ideally take the form of facility centres where one can get a roof of the right size over one's head, access to a piano or a kiln, and to records, books, or slides. Schools, TV stations, theatres, and the like are designed primarily for use by professionals. De-schooling society means above all the denial of professional status for the second-oldest profession, namely teaching. The certification of teachers now constitutes an undue restriction on the right to free speech; the corporate structure and professional pretensions of journalism, an undue restriction on the right to free press. Compulsory attendance rules interfere with free assembly. The de-schooling of society is nothing less than a cultural mutation by which a people recovers the effective use of its constitutional freedoms: learning and teaching by men who know they are born free rather than treated to freedom. Most people learn most of the time when they do whatever they enjoy; most people are curious and want to give meaning to whatever they come in contact with; and most people are capable of

personal intimate intercourse with others unless they are stupefied by inhuman work or turned off by schooling.

The fact that people in rich countries do not learn much on their own constitutes no proof to the contrary. Rather it is a consequence of life in an environment from which, paradoxically, they cannot learn much, precisely because it is so highly programmed. They are constantly frustrated by the structure of contemporary society in which the facts on which decisions can be made have become more elusive. They live in an environment in which tools that can be used for creative purposes have become luxuries, an environment in which the channels of communication serve a few to talk to many.

A New Technology rather than a New Education

A MODERN MYTH would make us believe that the sense of importance with which most men live today is a consequence of technology that cannot but create huge systems. But it is not technology that makes systems huge, tools immensely powerful, channels of communication one-directional. Quite the contrary: properly controlled, technology could provide each man with the ability to understand his environment better, to shape it powerfully with his own hands, and to permit him full intercommunication to a degree never before possible. Such an alternative use of technology constitutes the central alternative in education.

If a person is to grow up, he needs, first of all, access to things, to places, and to processes, to events and to records. He needs to see, to touch, to tinker with, to grasp whatever there is in a meaningful setting. This access is now largely denied. When knowledge became a commodity, it acquired the protections of private property, and thus a principle designed to guard personal intimacy became a rationale for declaring facts off limits for people without proper credentials. In schools teachers keep knowledge to themselves unless it fits into the day's programme. The media inform, but exclude those things they regard as unfit to print. Information is locked into special languages, and specialized teachers live off its retranslation. Patents are protected by corporations, secrets are guarded by bureaucracies and the power to keep others out of private preserves – be they cockpits, law offices, junkyards, or clinics – is jealously guarded by professions, institutions, and nations. Neither the political nor the professional structure of our societies, East and West, could withstand the elimination of the power to keep entire classes of people from facts that could serve

them. The access to facts that I advocate goes far beyond truth in labelling. Access must be built into reality, while all we ask of advertising is a guarantee that it does not mislead. Access to reality constitutes a fundamental alternative in education to a system that only purports to teach *about* it.

Abolishing the right to corporate secrecy – even when professional opinion holds that this secrecy serves the common good – is, as shall presently appear, a much more radical political goal than the traditional demand for public ownership or control of the tools of production. The socialization of tools without the effective socialization of know-how in their use tends to put the knowledge-capitalist into the position formerly held by the financier. The technocrat's only claim to power is the stock he holds in some class of scarce and secret knowledge, and the best means to protect its value is a large and capital-intensive organization that renders access to know-how formulable and forbidding.

It does not take much time for the interested learner to acquire almost any skill that he wants to use. We tend to forget this in a society where professional teachers monopolize entrance into all fields and thereby stamp teaching by uncertified individuals as quackery. There are few mechanical skills used in industry or research that are as demanding, complex, and dangerous as driving cars, a skill that most people quickly acquire from a peer. Not all people are suited for advanced logic, yet those who are make rapid progress if they are challenged to play mathematical games at an early age. One out of twenty kids in Cuernavaca can beat me at Wiff 'n' Proof after a couple of weeks' training. In four months all but a small percentage of motivated adults at our CIDOC centre learn Spanish well enough to conduct academic business in the new language.

A first step towards opening up access to skills would be to provide various incentives for skilled individuals to share their knowledge. Inevitably, this would run counter to the interest of guilds and professions and unions. Yet multiple apprenticeship is attractive. It provides everybody with an opportunity to learn something about almost anything. There is no reason why a person should not combine the ability to drive a car, repair telephones and toilets, act as a midwife, and function as an architectural draftsman. Special interest groups and their disciplined consumers would, of course, claim that the public needs the protection of a professional guarantee. But this argument is now steadily being challenged by consumer protection associations.

We have to take much seriously the objection that economists raise to the radical socialization of skills: that "progress" will be impeded if knowledge – patents, skills, and all the rest – is democratized. Their arguments can be faced only if we demonstrate to them the growth rate of futile diseconomies generated by any existing educational system.

Access to people willing to share their skills is no guarantee to learning. Such access is restricted not only by the monopoly of educational programmes over learning and of unions over licensing but also by a technology of scarcity. The skills that count today are know-how in the use of tools that were designed to be scarce. These tools produce goods or render services that everybody wants but only a few can enjoy, and which only a limited number of people know how to use. Only a few privileged individuals out of the total number of people who have a given disease ever benefit from the results of sophisticated medical technology, and even fewer doctors develop the skill to use it.

The same results of medical research have, however, also been employed to create a basic tool kit that permits Army and Navy medicos, with only a few months of training, to obtain results under battlefield conditions that would have been beyond the expectations of full-fledged doctors during World War II. On an even simpler level any peasant girl could learn how to diagnose and treat most infections if medical scientists prepared dosages and instructions specifically for a given geographic area.

All these examples illustrate the fact that educational considerations alone suffice to demand a radical reduction of a professional structure that now impedes the mutual relationship between the scientist and the majority of people who want access to science. If this demand were heeded, all men could learn to use yesterday's tools rendered more effective and durable by modern science, to create tomorrow's world.

Unfortunately, precisely the contrary trend prevails at present. I know a coastal area in South America where most people support themselves by fishing from small boats. The outboard motor is certainly the tool that has changed most dramatically the lives of these coastal fishermen. But in the area I have surveyed, half of all outboard motors that were purchased between 1945 and 1950 are still kept running by constant tinkering, while half the motors purchased in 1965 no longer run because they were not built to be repaired. Technological progress provides the majority of people with gadgets

they cannot afford and deprives them of the simpler tools they need.

Metals, plastics, and ferro-cement used in building have greatly improved since the 1940s and ought to provide more people the opportunity to create their own homes. But in the United States while in 1948 more than 30 per cent of all one-family homes were owner-built, by the end of the 1960s the percentage of those who acted as their own contractors had dropped to less than 20 per cent.

The lowering of the skill level through so-called economic development becomes even more visible in Latin America. Here most people still build their own homes from floor to roof. Often they use mud in the form of adobe and thatchwork of unsurpassed utility in the moist, hot, and windy climate. In other places they make their dwellings out of cardboard, oil drums, and other industrial refuse. Instead of providing people with simple tools and highly standardized, durable, and easily repaired components, all governments have gone in for the mass production of low-cost buildings. It is clear that not one single country can afford to provide satisfactory modern dwelling units for the majority of its people. Yet everywhere this policy makes it progressively more difficult for the majority to acquire the knowledge and skills they need to build better houses for themselves.

Self-Chosen "Poverty"

EDUCATIONAL CONSIDERATIONS PERMIT US to formulate a second fundamental characteristic that any post-industrial society must possess; a basic tool kit that by its very nature counteracts technocratic control. For educational reasons we must work towards a society in which scientific knowledge is incorporated in tools and components that can be used meaningfully in units small enough to be within the reach of all. Only such tools can socialize access to skills. Only such tools favour temporary associations among those who want to use them for specific occasions. Only such tools allow specific goals to emerge in the process of their use, as any tinkerer knows. Only the combination of guaranteed access to facts and of limited power in most tools renders it possible to envisage a subsistence economy capable of incorporating the fruits of modern science.

The development of such a scientific subsistence economy is unquestionably to the advantage of an overwhelming majority of the people in poor countries. It is also the only alternative to progressive pollution, exploitation, and opaqueness in rich countries. But, as we

have seen, the dethroning of the GNP cannot be achieved without simultaneously subverting GNE (Gross National Education – usually conceived as manpower capitalization). An egalitarian economy cannot exist in a society in which the right to produce is conferred by schools.

The feasibility of a modern subsistence economy does not depend on new scientific inventions. It depends primarily on the ability of a society to agree on fundamental, self-chosen anti-bureaucratic and anti-technocratic restraints.

These restraints can take many forms, but they will not work unless they touch the basic dimensions of life. (The decision of Congress against development of the supersonic transport plane is one of the most encouraging steps in the right direction.) The substance of these voluntary social restraints would be very simple matters that can be fully understood and judged by any prudent man. The issues at stake in the SST controversy provide a good example. All such restraints would be chosen to promote stable and equal enjoyment of scientific know-how. The French say that it takes a thousand years to educate a peasant to deal with a cow. It would not take two generations to help all people in Latin America or Africa to use and repair outboard motors, simple cars, pumps, medicine kits, and ferro-cement machines if their design does not change every few years. And since a joyful life is one of constant meaningful intercourse with others in a meaningful environment, equal enjoyment does translate into equal education.

At present a consensus on austerity is difficult to imagine. The reason usually given for the importance of the majority is stated in terms of political or economic class. What is not usually understood is that the new class structure of a schooled society is even more powerfully controlled by vested interests. No doubt an imperialist and capitalist organization of society provides the social structure within which a minority can have disproportionate influence over the effective opinion of the majority. But in a technocratic society the power of a minority of knowledge capitalists can prevent the formation of true public opinion through control of scientific know-how and the media of communication. Constitutional guarantees of free speech, free press, and free assembly were meant to ensure government by the people. Modern electronics, photo-offset presses, time-sharing computers, and telephones have in principle provided the hardware that could give an entirely new meaning to these freedoms. Unfortunately these things are used in modern media to increase the

power of knowledge bankers to funnel their programme-packages through international chains to more people, instead of being used to increase true networks that provide equal opportunity for the encounter among the members of the majority.

Deschooling the culture and social structure requires the use of technology to make participatory politics possible. Only on the basis of a majority coalition can limits to secrecy and growing power be determined without dictatorship. We need a new environment in which growing up can be classless, or we will get a brave new world in which Big Brother educates us all.

F. Champion Ward

Thinking about Education

IT IS VERY HARD TO THINK CLEARLY and usefully about education, and it is one measure of the dauntless resiliency of J.P. Naik that he has never ceased to think about that vast, shapeless, and vexatious subject. Since the early fifties, in moments of personal discouragement concerning the quality of analysis and reflection in education, the example of Mr Naik's perseverance and of the steady broadening of his thought and work has always restored my own readiness to try again.

We all know some of the reasons why thinking inclusively and consistently about education is so difficult. Education engages and shapes the mind, but also character and taste. It is not a science but an art, a "doing", carried on most fallibly in the murkiness of Plato's cave. Its ends and uses are so protean that it seldom wholly succeeds or wholly fails. Rigour and clarity in analysing education are bought at the expense of a distorting abstraction. And even when analysis discloses grounds for change, the inertial force of extant practice, together with the uncritical ardour of most practitioners, usually prevent the indicated change from being made.

Add to these limitations a gross debasement of the language in which education is discussed by "professionals"* and the grounds for discouragement concerning the quality of thought about education become all too clear.

Yet better thinking about education is as necessary as it is rare. In the current decade, this necessity has been impressed with special force on those nations whose systems of education expanded rapidly, in the context of "national development", in the aftermath of the

recession of Western empires which followed World War II. Concurrently, public and private "agencies" assisting educational development in these nations have met together and with leading Third World educators (Mr Naik among them) to "reconsider" education and development and the relations between them. And UNESCO, sensing this mood of self-examination, in 1971 appointed an International Commission on the Development of Education which articulated some of the questions and options now faced by education and educators in all parts of the world.

As one who took part in these exercises, I find that their principal outcome for me was to point up the worldwide need for developing in every country a national capacity for "research and development" in education. This need was compactly expressed in the final recommendation of UNESCO's International Commission: "...that the present state of 'research and development' in education [be reviewed] with a view to strengthening the capacities of individual countries to improve their educational systems and to invent, design, and test new educational experiments appropriate to their cultures and resources."*

What should be the principal components of such a standing capacity to exercise effective control over the form and quality of a nation's educational development, and what are the conditions for the effective functioning of those components? Before discussing these elements individually, it is important to stress the necessity of providing for interaction and mutual understanding among them. In many nations now, there are planners who only plan, researchers who only enquire, managers who only manage, and practitioners who only perform. Because of the mutual insulation of these components, the effective product of their specialized efforts is less than their sum.

Planners and Executives. There should be a number of planners and administrators who have been trained in such a way that they can think about education in its full social and cultural context. Their planning, in other words, would not be confined to the technical calculation of means to unexamined ends. Rather, they would recognize and help others in their societies to recognize that the choice of educational means is not independent of the purposes their society and its members want education to serve. At the same time, they

*How seldom does one come across such a lucid and clearly expressed argument as that of Chanan and Gilchrist's *What School Is For!*

**Learning To Be* (UNESCO : Harrap, 1972; Indian edition: Sterling, 1973), p. 263.

should be more than social philosophers. They should be inventive in devising ways to shape education to social ends and adapt it to cultural values, and they should know enough about research to be intelligent supporters and consumers of the work of educational researchers and interpreters.

Researchers and Interpreters. Research, as an aid to informed judgment, understanding, and action in education, should vary in a number of respects. In content, research should range from more or less uncomplicated disclosure of fact – which pupils drop out of school? At what points? Where are their schools? Who is served and not served by them? – through the identification of the proximate causes of particular states of affairs in education (e.g. dropping out of school), to the application to education of social science theories and humanistic perspectives.

Institutions. This research capability should be exercised at three “distances” from decision-making and action: first, in “research units” in close proximity to planners and administrators, to help informed decisions on short-term issues (e.g. where the next secondary schools should be located); second, at a semi-detached distance from decision-making in the form of middle-term “applied” research carried on in special centres or programmes (e.g. possible ways to encourage local financing of schools, better ways to retrain teachers); and, third, in universities or other centres of independent thought, investigation, and advanced training, studies of long-term social processes and cultural values affecting education and *vice versa* (e.g. the education of women).

Two other institutional requirements should be cited: some means of producing and circulating an *indigenous literature* on the nation’s educational efforts and on relevant experience elsewhere, and adequate means for *processing and storing research data*.

Official Attitudes. Officials may be expected to support short-term research designed to inform decisions which they must make. They may also, but less steadily, support middle-term enquiries into problem areas of current looming concern. But one must be less confident that officials will see the value of supporting theoretical and even heretical enquiry by autonomous professionals “following the argument wherever it may lead”. The deliberate subsidy of critical

thought about alternative possibilities has a limited appeal for the managers of existing systems.

There is another reason why official support for free enquiry is less than fervent. The time-span over which such enquiry “pays off” in action is longer by far than the usual time-span of decision-making by officials, or even of their tenure in office. In this regard, societies which manage to maintain some unofficial sources of financing, in the form of foundations, private associations, or independent universities and research centres, will have a better chance of making self-corrective progress than will societies confining support to a single source. Change occurs in both situations, but in single-source systems it is apt to take the form of periodic convulsions, brought about, as in France in 1968, by rigidities of long standing, or, as in the Soviet Union under Khrushchev, by general (but unconvinced) acquiescence in a political leader’s pet ideas about education. This distinction, however, is not encouraging, since most tertiary institutions in developing countries are government-owned or -aided. Must long-term social diagnosis and interpretation await the day when philosophers are kings? If all had been going smoothly in education in recent years, the answer might well be “Yes”. But in many developing countries there is now such a severe and growing tension between resources and the commitment to education as a universal right of citizenship, and such concern over the fit between the existing educational system and economic reality, that encouraging “alternative thinking” and taking its products seriously may look to officials like more gain than risk.

But for the long haul, the best hope of ensuring a steady flow of long-term enquiry is that a nation achieve a critical mass of able social scientists, historians, and philosophers, and that some of these be attracted to education as a field for research and interpretation. If such a group were also to train others, some of whom became officials, this might in time lead to deeper understanding of the possibilities and limitations of action on the part of planners and executives and to the choice of more productive topics on the part of researchers.

Public Understanding. But it is not enough that researchers and officials should display a readiness to communicate. There is a further need for citizens who understand that critical discourse and deliberate experimentation are important to the creative advance of any society. To develop such a citizenry is the vital task which societies assign

above all to their colleges and universities. Over and above their specialized research and their training of scholars and scientists, engineers, lawyers and doctors, planners, managers and teachers, it is to its universities and colleges that any society must look for the maintenance of that level of higher, general education which will ensure public understanding and respect for the exploring mind and a readiness to consume the products of disciplined enquiry. Obviously, this atmospheric factor will vary greatly from society to society, and in some societies its near-absence will inhibit enquiry and restrict greatly the range of public discussion for years to come.

International Connections. Although educational and cultural development is a profoundly national business, it need not be provincial. Developing countries continue to seek connections with industrialized countries, and *vice versa*, and, increasingly, with other developing countries having similar problems, resources, and purposes. Participation in regional and other international "networks", visits to particular projects in other, cognate countries, and making national experience available to others, should be provided for as necessary international components of a national capacity.

CLEARLY, THE FOREGOING MODEL, is only an outline, full of variables which would be replaced by different values in different nations. Clearly, also, the model can be viewed as minimal or visionary: minimal, in that a few inventive and creative people are far more than none, even in very large nations; visionary, in that no country, "developed" or "developing", will ever have enough such people.

Difficult and prolonged as the task of developing a national "R and D" capacity in education would be, the components cited in the foregoing model could be brought into being by deliberate human effort: by training, by support to research, by new administrative structures and procedures, by new linkages between professionals and concerned publics, and by new modes of communication between "thinkers" and "doers". Indeed, without saddling him with the details of the model here advocated, one can say that J.P. Naik, in his own person and work and through his influence on others, has himself been a prime mover in the building of India's capacity for educational research and development. However, it is not clear to me that any country, whether it be ancient Athens or modern India, may grow its

own gadfly through deliberate cultivation. A Socrates or a Naik simply appears from time to time as a free gift of the gods, quickening and disturbing the national scene, and nerving a host of others to work and think to his own high standard. Therefore, the ultimate prescription for any nation seeking improvement in its educational system is this: First, be blessed with a Naik, and all else will follow.

M.S. Gore

Social Goals and the Social Content of Education

THE PROCESS OF EDUCATION is basically a process of communication between the educator and the educand. The messages of course are many and varied. They may relate to matter and to the physical world: they may relate to the bio-physical world of animals and plants; or they may relate to man, human nature and the particular society of which the educator and the educand are both members. The messages may be purely descriptive, interpretative, or didactic-admonitive-exhortative; they may be oriented to communicating information or to developing intellectual, manual, or social skills and attitudes.

The "social content" of education consists of those messages which directly and indirectly communicate to the student some view of man and his relationship to his environment – primarily social but also physical and bio-physical environment. The social content of education is one of the factors that influence the student's perception of himself as a member of his society. Even if one were not to adopt a totally behaviouristic approach, there is no denying the fact that man's perception of himself and of others, his understanding of the manner in which he should conduct himself, and his expectations of how others should behave towards him are greatly influenced by the formal and informal processes of socialization, including education, to which he is exposed. Throughout his life man is being influenced consciously and unconsciously by others, and himself influences others and in this sense the process of moulding, influencing, socialization, and education is a life-long process.

In considering the social content of education we limit ourselves

more appropriately to the formal process of education which is one of the ways through which a society may be said to influence its young. The specific areas or aspects of the individual's life in which education, as different from other agencies in society, is influential have never been clearly demarcated. Nor can they be. Education is often supposed to develop particularly the cognitive, intellectual skills of an individual, but we know that education influences affect as well and that affect also constrains and influences cognitive abilities. In this paper I would like to confine myself to the influence that education may exercise in shaping the social orientation of the young – their values, their image of the society in which they live, their attitudes to it, their aspirations for themselves and for their society. Here again we may have to limit our discussion to school education – a stage at which the influence exercised by education in moulding the social outlook of the young is likely to be considerable and also a stage beyond which most children do not proceed.

A definitive paper on the social content of education should begin with a review of what this content tends to be in our schools today, followed by a discussion of the adequacy or inadequacy of this content in terms of certain criteria. This paper, however, does not attempt to undertake such a review. It concerns itself more with a specification of what this content should be in our society, the forms that the communication of this content may take, and the constraints to which this process of communication is likely to be subjected.

Indian Social Goals

AN ATTEMPT TO SPECIFY what the social content of education should be in any society must be based on some assumptions about the articulate goals and values of that society. These goals and values are often contained in formal documents such as political constitutions of countries, statements of policy, pronouncements of heads of government, manifestoes of ruling parties, etc. The social content of education is also influenced by non-articulate goals and values, but in so far as these are non-articulate any statements of what the social content *should* be cannot be based on them. The non-articulated goals and values will of course form an important structural constraint in the effective communication of any social message. This aspect shall be examined later.

The articulated goals and values of Indian society are contained in the aims and objects, the directive principles, and the statement of

fundamental rights in the Constitution.

Briefly stated, these goals visualize the creation of a democratic, secular, and socialist society. These words express our aspirations for the nature of social, political, and economic relationships that will characterize Indian society. From another perspective there is another important goal that Indian society seems to be pursuing, viz.. the goal of material well-being or economic growth. Putting these two sets of objectives together, it may be said that India is pursuing the goal of an economically developed society characterized by a democratic, secular, and socialist polity. Economic development is usually interpreted as a rise in the gross national product. This is important, but in a socialist society it should ensure minimally the removal of mass poverty. Socialism should imply not only nationalization or state regulation of the economy, but it should ensure the minimization of social, economic, and political inequalities in society. Without the removal of gross social inequalities there can be no real equalization of opportunity even through free education. Democracy should mean minimally civil liberties and the right to vote, and it should also mean an expanding opportunity for the citizen to participate in the decision-making structures at various levels of governmental and civic organization. Secularism should mean at the societal level at least freedom from religious discrimination or from the use of religion as a base for political action and organization.

If these are the broad goals of Indian society, what are their implications for the system of education, particularly for the content of education? It is obvious that if we are to achieve a particular type of society then our efforts will be facilitated if the individuals who make up the society imbibe early in their life values and behavioural patterns which are consistent with these goals. Individual values and behavioural patterns are shaped largely through the instrumentalities of socialization of which education is one. It is true, of course, that there are other important influences on children which may not work in the same direction as education and, further, that education as an institution is itself influenced not only by the articulated goals but by other overt and covert influences which may or may not be consistent with the declared goals. Even so the social message communicated through the system of education is at least one important factor determining how far children in a particular society will imbibe the values formally enunciated by that society.

Types of Social Content

THE SOCIAL CONTENT OF EDUCATION takes various forms. Some of the social content of education is made up of simple, direct messages: exhortative messages for young children on the virtues of nationalism, patriotism, community spirit, the virtues of daily life such as honesty, hard work, unity, etc. Such direct messages are open in their didactic intent and are expressed as simple aphorisms, quotations from classic writers, or selections from Aesop's fables, *Panchatantra* stories, or other folk literature. It is important that educationists carefully examine how far the messages communicated in this manner are consistent with the values and goals sought to be projected.

A somewhat less direct form of communication of social messages is through extracts and selections from contemporary creative literature – novel, short story, or poetry. The focus of attention is often on the literary value of the particular selection, but in so far as the selections deal with social life they inevitably communicate images with some of which the pupil identifies and others which he rejects. What are the kinds of stereotypes of ethnic groups, what personal attitudes which all will support the growth of a secular society? Do they promote an outlook conducive to the acceptance of other people, to attitudes which all will support the growth of a secular society? Do they help develop non-discriminatory attitudes? What kind of identity formation do they foster – one which emphasizes religion and caste or one based upon merit and achievement? Do the messages foster dependence or autonomy? Do they emphasize conformity and obedience or relative independence and capacity for individual judgment?

Problems of Interpreting History

EVEN MORE INDIRECT BUT HIGHLY COMMUNICATIVE are the messages generated by the treatment of history. In the Indian context the interpretation of historical events faces a particular problem in the treatment of Hindu-Muslim relations in terms of its significance for the generation of secular attitudes. The fact is that some of the historical personages – both Hindus and Muslims and, later, Sikhs – dealt with during this period were openly communal. Depending upon the community of the pupil he may tend to identify himself positively or negatively with some of these historical figures. In order to counter these possibilities text-book writers are asked sometimes to handle the data in particular ways. It is often argued that much of the

communal spirit attributed to particular historical personages was just bad history or motivated history founded on the prejudices created first by the British historians and continued by Indians through an uncritical imitation or, again, through motivated writings. There is thus a plea for a rewriting of Indian history – in fact, of world history. Up to a point this effort can be valid; but if effort at rewriting replaces one type of chauvinism by another, or if it doctors history to show that disharmony between Hindus and Muslims, or Catholics and Protestants, or between Shia Muslims and Sunnis did not exist in any society at any time in history, it will have defeated the very purpose of history-writing. A secular outlook is not likely to emerge by whitewashing the past; it is more likely to emerge by a discriminative examination leading to an acceptance or rejection of particular aspects of our past based upon our contemporary value systems. While it is true that we should not completely reject our past, we need not wholly accept it either.

Teaching Social Science

APART FROM THE PRESENTATION OF HISTORY, there is another way in which the social message gets communicated to the pupils. This is through description and analysis of social conditions. All social studies and social science courses at the school and college levels have to deal at some point or another with different aspects of contemporary social life. They have to describe and analyse in terms of possible causes various problems such as those of poverty, communalism, regionalism, problems of family and marriage, of caste and class, etc. How these problems are perceived and described, what kind of remedies are suggested for these problems depends very much upon the attitudes and background of the authors of text-books and the teachers in the classroom. Do their presentations support and promote the broader societal goals or do they tend to emphasize parochial perspectives and thus negate the liberal-humanistic messages that may otherwise be routinely given in a didactic fashion without any understanding of their implications for different aspects of life? In the interpretation of contemporary life, as in the interpretation of history, there is a temptation to misconstrue facts to serve one's particular ideological or theoretical predilection. This distortion of facts may be done both by chauvinists and by liberals and it may be done with the best of intentions. The problem of handling social data arises out of the tendency to seek support, justification,

and vindications of one's goals by a particular interpretation of these data. In so far as the available data permit different types of interpretation it may be permissible to propound one view with which one agrees rather than another with which one does not. But the temptation to see social facts selectively, to underline some and to deemphasize others sometimes proves too difficult to overcome. This temptation is all the more great for those who either derive their inspiration from the past or would argue that human history as well as contemporary social events can be explained by a single theoretical formulation. A scholar who openly states his value framework but does not necessarily seek its validation from some past event or some particular theory about the past may be better equipped to see the present with minimal distortion.

A society characterized by democracy, equality, and secularism cannot be built by pretending that our society in the past has always cherished these values or by assuming that there is any inevitability in the historical process which will lead us in that direction. The social content of education must provide a realistic assessment of the past and the present of our society, must identify its assets and liabilities and motivate the young to work towards the achievement of societal goals because they seem worthy in themselves – not because they guarantee continuity with the past or the fulfilment of a destiny.

It may be said at this point that there are varying degrees of ambiguity surrounding the basic societal goals of equality, secularism and democracy. The terms have been interpreted and understood differently by different persons. In this paper only one of these concepts has been selected for discussion.

Rationality and the Process of Socialization

HOWEVER DESIRABLE a rational, objective attitude towards contemporary and historical phenomena may be, it is difficult to sustain such a mental stance and to inculcate it in young children without anchorage in an adequate system of symbols and goals. Human actions are not always rational and human motivation does not follow a simple utilitarian means-ends sequence. The human being seems to need myths and creates them either to cope with his frustrations or in an effort to fill the gaps in his knowledge. Further, the process of socialization is also not a purely reason-based or intellectual process. It involves the commitment of an individual's emotions and sentiments to goals which may be regarded as ends in

themselves. Even simple rules of socially ethical behaviour require that man should give up the utilitarian rationality of maximizing his immediate satisfactions and pleasures and learn to posit long-term goals and objectives whose attainment often lies beyond the life-span of single individuals. This act of positing goals which lie beyond the experiential reality of individual lives is not essentially different from the act of creating "myths". These "myths", consisting of his ideals and goals, are necessary to enable man to mobilize his conscious and sub-conscious energies. These concepts belong to the realm of the "non-rational" in the limited sense that acts in pursuance of them may not directly benefit the individual, may not be out of his own life experience, and may not fit into any specific means-ends relationship perceivable by him. They have to be regarded as ends in themselves. The process of socialization involves the communication of these non-rational entities at the conscious as well as sub-conscious level of cognition or understanding. This commitment to the non-rational elements in life seems essential for organized group life. We seek the support of these non-rational elements even in the pursuit of what may be rational goals.

From this point of view the option available to a liberal educator is not that of denying the role of the non-rational in life, but of intelligently mobilizing it by providing new ideals, new belief systems, and new patterns of social behaviour with which the young can identify and which can serve as guides for short-term decisions and actions. Historically, the non-rational basis for ethical action has been provided by the concept of God and the associated concepts of religious merit and the life hereafter. Another source of ethical action has been provided by the territorial group entities of tribe, kingdom, nation, and the associated ideas of loyalty, sacrifice, and martyrdom of the individual in the service of the group entity. These two sources of the non-rational have often coalesced and the heads of tribe, kingdom, and nation have often been represented as earthly manifestations of godhood.

Today, with advance in science, scientific rationality has gained acceptance and this has made difficult the acceptance of supernatural entities which seem to set aside the laws of nature. The concepts of God and of institutionalized religion have therefore suffered a setback. Religion has suffered a setback also because it has tended to divide regional groups into smaller and conflicting entities based on sect and caste. The social content of education will have to help the

student to see where his ethical imperatives are derived from. If they are derived either from religion or from tradition they are likely to be found difficult to reconcile with certain other aspects of his life-experience and his school curriculum.

The idea of nationality, nationhood, and the virtue of patriotism are currently dominant. The development of modern technologies of agricultural and industrial production and of faster means of communication has developed a new interdependence between different regions of the globe and is making the existing national boundaries seem obsolescent. Yet the change is not likely to come about easily because national boundaries facilitate the maintenance of one important dimension of social stratification – the differential distribution of the gross world product on the basis of nationality. Nationalism which in the eighteenth and nineteenth centuries functioned as a cohesive force for societies divided by sect, religion, and race has now become an obstacle to the further integration of human groups into larger wholes. Therefore, a social content dwelling heavily on the virtues of one's own country and one's duties to it is likely to prove limiting in meeting the challenges of modern life. At the same time, given the particular stage of world transition through which we are passing, the developing countries will find themselves in a predicament if their youth do not develop any commitment to the countries of their birth.

Humanist Ethic

FROM A LIBERAL PERSPECTIVE the most important idea for developing a near-rational ethic is the idea of humanism interpreted as an ethic based on a belief in the worth of the human being. The overriding objective of a social organization based on this ethic is to promote the fullest development of the human potential at the social as well as the individual level. The implication of this ethic for the individual is that he should consider it his duty to strive to develop his potentialities to the maximum possible extent in a manner that is also conducive to the growth of others. The human individual has a dignity that is inviolable.

The value of equality flows from it. Though human beings are different from one another and often even unequal in particular skills or abilities, the social structure must not contribute to extend these inequalities to the general conditions of life of these individuals or to a continuation of inequalities from generation to generation. Social

inequalities are a negation of the value of individual human dignity and result in a construction of the individual's opportunity for growth.

This value of freedom is also a part of the humanistic perspective on life. Freedom and equality are mutually dependent and without either of these the human individual cannot grow to his full potentialities. In a democratic society this freedom is sought to be provided through a guarantee of the citizens' basic rights except during periods of emergency. Freedom of thought, freedom of expression, and freedom of association are at the core of this concept of citizens' rights.

Apart from freedom and equality, humanism also supports and demands the enunciation of non-discriminative criteria in the distribution of public services. In one sense this is a facet of the norm of equality, in another it is a facet of secularism.

In this sense the value-complex of humanism is likely to be supportive of the kind of society visualized by our constitution-makers and is less likely to run counter to the norms of rationality than a value-complex derived from assumptions about God and an after-life. Of course, in both cases the value-complex is "given" and not really derived.

It has been stated above that from a humanist standpoint the overriding objective of social organization is the promotion of the fullest development of human potential at the social as well as individual level. In this concept of the right of the individual to opportunities for his development is rooted the value of individualism. While the individual is dependent upon society, he need not be subordinate to it. Society in its turn depends upon the distinctive contributions of its individual members. One aspect of the acceptance of the value of individualism is the protection of the individual's right as a citizen and his right to differ and not conform in so far as non-conformity does not mean evasion of specific, defined responsibility and in so far as non-conformity does not interfere with someone else's life.

Social Goals and Personality Structures

WE HAVE SO FAR FOCUSED on the societal goals and norms of social behaviour which should be sought to be communicated through education. But these social goals have to be achieved through the behaviour of individuals. A society cannot create conditions of equality if the members of that society have not learned to behave towards each other as equals, or have not learned to respond to

incentives other than those of differentially higher rewards for their work as compared with their fellow men. Are there any attitudinal and behavioural patterns that when adopted by individuals are more likely to help achieve these societal goals?

Not a great deal of attention has been paid in our country to the implications of accepting certain broad societal goals from the point of view of the types of supportive personality structures that would be needed by them. There is of course no one-to-one relationship between a particular type of society and a particular type of personality and in any society at a given point of time there are bound to be varied patterns of personality represented in its population. Yet social psychologists, particularly psychologists concerned with the processes of social change and development, have tended to see particular personality structures as being more consistent with particular societal structures. For example, just as one distinguishes between totalitarian and free societies there is a parallel distinction between authoritarian and liberal personality profiles and it is argued that totalitarian societies support and derive support from authoritarian personality structures, and the open or free societies support and are supported by the non-authoritarian or liberal-permissive personality.

A society which is democratic must provide a decision-making structure in which the members of that society – those that are affected by the decisions – have an opportunity to participate in the decision-making process either directly or indirectly. But even if such a structure exists a society is not a functioning democracy except to the extent that individual citizens have equipped themselves to participate effectively in the process and do so. A democratic social structure has thus a motivational and behavioural counterpart at the level of the individual.

Similarly, while equality can be provided for structurally, it cannot be enforced except in so far as individuals value it, learn to stand up for it, and utilize the opportunity for their own development. There is thus an element of activism at the individual level involved in achieving socially defined goals. This activism on the one hand depends upon the objective life conditions and on the other helps sustain these conditions.

Personality Goals in Developing Societies

IT IS FROM THIS POINT OF VIEW that one has to consider the type of personality goals that should be communicated and encouraged

through the social content of education. What kinds of attitudes, motivational and need-fulfilment patterns are likely to be helpful in the creation of the society we visualize – a society characterized by a democratic, egalitarian, and secular polity? In terms of the dichotomy of totalitarian and free societies the type of society we want to create is a free society and therefore our socialization processes should seek to promote the non-authoritarian liberal personality patterns. But in some ways our society is different from the West-European or North-American liberal society. Those societies are economically developed societies, their path of development was the path of capitalism, and their development took place at a time when they were the first countries set on the path of industrialization and de-feudalization. India is not a developed country; it is entering very late on the path of industrialization and modernization, and its chosen path is a half-way house between a free, open-market economy and a wholly state-regulated, non-open-market economy. These differences between Western democracies and the Indian experiment are likely to be crucial. We have accepted the open society model for our polity, but a state-regulated model for our economy. Also, we have to strive to achieve social and economic development with a sense of urgency if development is to be achieved at all.

The non-authoritarian personality goals of Western democratic societies are accompanied by a considerable emphasis on individuality, individual freedom, and individual permissiveness. In so far as individualism implies autonomy of the individual psyche it is an important part of the broad liberal-humanist social ethic, and the Indian society must support the development of this quality. But individualism in the sense of pursuit of wholly self-centred goals is likely to be injurious to any society and particularly to a developing and egalitarian society which may have to regulate the distribution of the national resources and the national product. The Indian society may, therefore, have to emphasize group commitment and a limitation of personal wants along with its emphasis on individual freedom and autonomy.

A familial society fosters and strengthens group commitment at least at the level of the family, the caste and the village. But by the same measure it impedes the development of individual autonomy. A familial society inculcates respect for tradition and ensures continuity, but by the same measure it inhibits change and the ability to cope with change. A developing society, however, is a changing society,

changing in technology and in the conditions of life. Change is both a desired goal and a potential problem. Individuals in developing societies must be in a position to promote change as also to cope with it. Promoting change requires innovativeness and creativity, the ability to see new relationships between objects, and the ability to use available knowledge, information, or skills in new ways.

The ability to cope with change requires the ability to give up the old and to welcome the new, to live without developing set habits, to live without the assurance that the present bonds of relationships will last over time, to be able to discover opportunities in new situations. An individualist outlook may increase a person's ability to cope with change in so far as it weakens his group dependence. Can we promote group commitment without fostering group dependence? Or can we promote individual initiative, innovativeness, and creativity without encouraging self-centredness and self-aggrandisement?

From an educational point of view the problem is complex. Do we emphasize the individual or the group? But, as in all such problems, the solution probably lies at neither extreme. Moreover, the problem relates not only to group dependence and group commitment in general, it is equally a problem of which is the major group of orientation of the individual. Is it the family, the caste, the village, the work group of an industry, a commune, or the abstract group entity of the nation?

The limitation of personal wants is a social as well as an economic necessity for a developing society. Austerity as a personal trait is useful from an economic point of view in so far as it prevents diversion of scarce resources to wasteful consumption. It is also socially useful in so far as it may facilitate the process of a more equitable distribution of goods and services in the community.

Thus, an activist orientation, creativity, the ability to cope with change, personal simplicity, and group commitment are some of the personality goals that should be strengthened through the content of education. Equally important are an achievement orientation and an acceptance of mobility and change. An achievement orientation is different from mere activism. The achievement orientation legitimizes an individual status in society based upon his own achievements rather than by the status ascribed to him at birth. These are qualities in addition to a broad acceptance at the intellectual level of the societal values represented by democracy, equality and secularism.

A word about secularism. Secularism as a social value has two

sources – one linked with the necessity of holding together a multi-religious society and the other linked with the increasing obsolescence of religious belief and the growing dominance of scientific rationality. Secularism of the former origin makes a plea for tolerance of religious differences and seeks to ensure that religious affiliation does not result in discrimination against the individual in his access to opportunities for fulfilment. Secularism of the latter variety considers religion to be irrelevant in social as well as individual life and insists that reason alone can be a guide to action. A secularist polity based upon tolerance of religious differences does not require and cannot by itself generate rationalist attitudes in life. In so far as rationality is a value it must be independently inculcated. It is not a part of the value complex of secularism if secularism only means religious tolerance.

Constraints on Effectiveness of Social Message

WE HAVE SO FAR DISCUSSED what the social content of education should be in India given a certain set of social goals. We may now turn to a discussion of the factors that will determine the effectiveness with which this content is likely to be communicated.

The most important of the factors influencing the effectiveness of the social message communicated by education would be the extent of concordance between the values “preached” through education and the values practised in the larger society. If education communicates altruistic values and life in society is characterized by self-oriented action, or if education verbalizes rationalist norms whereas life in society is characterized by a wide prevalence of superstitious and credulous actions, the social content of education will tend to give rise to hypocrisy and cynicism. The young will come to believe that what they are taught is not expected to be practised.

Of the general social environment two aspects have a particular significance for the effectiveness of the social message. One of these is the in-class and out-of-class behaviour of teachers. The teachers constitute an important reference group for young students not only for their intellectual training, but also for the patterns of social behaviour they imbibe. If teachers are authoritarian in their dealings with students or if they display social prejudices based on caste, religion, or language it is unlikely that they can reinforce the verbal message of democracy, equality, and secularism contained in the textbooks. On the other hand, if they practise the values which they

transmit in their teaching, the chances are that they will stand out as “wholesome” points of anchorage for their students even in the midst of a social environment which otherwise is not conducive to the inculcation and practice of those values.

The other aspect of the educational system which has significance for the effective communication of the social message is the total structure of the education system itself – the rules, the procedures, and the functioning of various educational authorities. More specifically, the question would be whether the rules for admission of students and for recruitment of staff, the treatment of teachers by institutional administrators, and the procedures of student management developed by them are in conformity with the democratic and universalistic values which are held up as the cherished goals and guiding principles of the society. The manner of institutional functioning is important not only in the sense that institutional life is a part of the total environment within which education is conducted, but because of the direct impact it has on the behaviour and expectations of teachers and students in an institution. In the educational system, as in all other major systems, there are several levels at which decisions are made – the Central government, the State government, the university, and the individual college or other corresponding levels for the school system – and the decisions and the behaviour of individuals at all these levels have broadly to conform to the values enunciated. It sometimes happens that while rules are formulated to conform to declared policies the behaviour of individuals at various levels is influenced by local, economic, and political considerations which are operative at their particular level and which may often lead to willing or forced deviation from policy. The chances are that in a plural society the economic and political factors mentioned above do not remain mere idiosyncratic deviant influences but become endemic to the system. In that circumstance the behaviour of decision-makers at various levels of the education system will not conform to the goals and norms defined for the system as a whole. The education system may not then serve effectively the purpose of communicating the social goals to its students.

Gunnar Myrdal

Educational Reform in Underdeveloped Countries

AS MORALITY AND MORALS ARE COMMONLY UNDERSTOOD in individualistic terms, their relation to education may not be readily seen. In any case, the actual problems of education in underdeveloped countries, which are very grave, are not primarily that education is not more effective there in fostering among the people moral attitudes in the ordinary sense. And on that type of problem I am not an expert.

Their problems in this field are, instead, that education is grossly inadequate from the point of view of promoting development. Education is there often, in fact, mis-education and its impact is anti-developmental.

The shortcomings in their educational systems are manifold, as I will come to touch upon. At bottom, a main cause, besides poverty, why they have persisted, is the selfishness of those upper strata who hold power in these countries, and do it rather independently of their constitutions. They have not been prepared to take the consequences of the goal to reach greater equality which they commonly pronounce. Instead, they have been bent on perpetuating educational systems that preserve their traditional privileges.

If we are prepared to extend morality from the private to the public sphere, this can certainly be censured as immoral. It was in that sense that John Stuart Mill in a work written in his youth proclaimed that the social sciences were moral sciences. What we now usually refer to as "economics" was "political economy". In later time, economists and other social scientists have commonly tried to shy away from valuations and been proud of this pretension as testifying to "professionalism". I am in that sense an old-fashioned political economist.

I even mean that I then stand on firm logical ground, since valuations are always with us in all research, however purely factual we try to make it look. There must be questions before answers can be given. There is no view, except from a viewpoint. In the questions raised and the viewpoint applied valuations are involved. A disinterested research there has never been and can never be.

The classical and early neo-classical authors founded their thinking on the utilitarian moral philosophy, in its turn founded upon the hedonistic associational psychology. Both are long since outmoded. I have to make my value premises explicit and have to give rational reasons why I have chosen them.

BUT LET ME COME TO THE FACTS. The colonial era ended by leaving the masses of people in the newly independent countries mostly untouched by any formal education. There are exceptions. The colonial authorities in the United States in its short time as a colonial power over the Philippines, differing from the English, the Dutch, and the French in other parts of South Asia, placed more emphasis on education of the people.

With that and a few other exceptions, the main objective was to train a small section of the population to serve as clerks, minor officials of all sorts, in several colonies even as higher administrative functionaries and, to some extent, as professionals. It is important to state that this bent of their interest was thoroughly shared by the upper strata in the colonies, who were eager to avail themselves of the opportunities to profit by serving their masters.

These elite schools were regularly of a "literary" or "academic" type – what is now called "general" – even more than in the metropolitan countries themselves at that late time. Little attention was given to science and still less to technical subjects. Students commonly expected to be "deskmen", not soiling their hands. Importance was given to passing examinations and acquiring status, while practical training for life and work was ignored.

Wherever there was much of a liberation movement, educational reform stood high on the agenda. And after independence, demands were often raised that the entire system of education should be "revolutionized". But this is exactly what did not happen. The explanation is, of course, that the coming of independence did not work great changes in the people or their society.

The educational establishment is part of the larger institutional

system which includes the social and economic stratification, the distribution of property, and the power relations. It embodies strong vested interests on the part of the administrators, the teachers, the students and, above all, the families in the powerful upper strata who do not want to undermine the bolstering of their position provided by the inherited school system.

THERE HAS BEEN, HOWEVER, ONE REFORM IDEA continually expressed with seemingly great determination: the extension of popular education and the liquidation of illiteracy. This represents the main, and almost the only, break with the elite ideology from the colonial era. Literacy is needed for acquiring skill in all fields. That widespread literacy is a precondition for any attempt to create an integrated nation with wide participation of the people is certain.

The goal then was limited, however, to making available primary schools for all children. This implied unfortunately downgrading adult education, particularly literacy classes. But such adult education is needed to shorten the time period before literacy becomes universal. For another thing, adult education, with emphasis on literacy, could help to make the school education of children more effective. All the information we have suggests that children living in an illiterate surrounding more easily lapse into illiteracy.

Some efforts to build up adult education have been made in some underdeveloped countries. But not much has come out of it. When a country "goes Communist", however, one of the first things which happens is usually that a vigorous literacy campaign is waged to make the whole people literate within a few years. There should be nothing sinisterly Communistic about this particular policy line, which is an inheritance from Russia, indeed begun long before the Communist revolution.

Meanwhile in many underdeveloped countries graduates from high schools and universities crowd in the cities as unemployed, but it has proved impossible to get them out in the villages and the urban slums to teach the masses of people to read, write, and reckon. Many of the graduates are radical, but they apparently do not identify themselves with the huge underclass.

THE EFFORTS HAVE THUS BEEN DIRECTED upon rapidly enlarging the intake of children into the primary schools. These countries then start out under great difficulties. For one thing, children of school age form

a much larger percentage of the population. And there is at the start less of everything – school buildings, teachers, textbooks, writing paper, etc. – needed to run schools.

But there is nevertheless a valid criticism to make. Although the declared purpose was to give priority to the increase of elementary schooling in order to raise the rate of literacy in the population, what has actually happened in most underdeveloped countries is that secondary schooling has been rising much faster and tertiary schooling has increased still more rapidly. This has happened in spite of the fact that secondary schooling seems to be three to five times more expensive than primary schooling, and schooling at the tertiary level five to seven times more expensive than at the secondary level.

Even more remarkable is the fact that these tendencies seem rather more accentuated in the poorest countries, which start out with many fewer children in primary schools and which should have the strongest reasons to follow out the programme of giving primary schooling the highest priority.

When this happens, it implies that the school system has been allowed to let in a swelling stream of pupils through the established channels without interfering with it except by trying to enlarge those channels where the pressure in society is the greatest. Those who can effectively exert pressure are parents in the middle and upper strata. Here we see again how the school system is determined by the inegalitarian economic and social stratification and the unequal distribution of power.

I should warn that most of the statistics on education in underdeveloped countries exaggerate the accomplishments and do not warrant their confident use in much of the literature. The figures for literacy usually overestimate the actual spread of literacy, particularly if we mean that degree of functional literacy which enables a person to have any use of it in life and work.

Likewise, the enrolment figures give an inflated account of school performance, if by that is meant the extent to which children actually attend schools. The bias works most strongly for primary schools and more strongly for girls than for boys. It is also most accentuated in the very poor countries and there in the poorest districts.

Important in that respect is what in South Asia is called "wastage" and "stagnation". Children who have enrolled drop out or do not attend school regularly. If they do not drop out of enrolment they then become repeaters, which is often a prelude to dropping out. In

very poor countries like India or Pakistan ordinarily less than half of those children who originally were enrolled complete primary school.

Irregular attendance, repeating, and dropping out represent a huge waste of resources. If the expenditure for primary schools were expressed in terms of cost per child who successfully completes primary school, the cost per pupil would be much greater than is commonly accounted for. Unfortunately, the cost per pupil so calculated would be particularly high in the poorer countries and the rural districts. The wastage is greatest where it can least be afforded.

Still far too little attention is given to this problem. The legislation dealing with compulsory education is seldom enforced. Particularly in the poorer countries and the poorer districts a general lack of efficiency and of discipline permeates the whole school system.

The availability of adequate school rooms, textbooks, writing paper, and other kind of teaching aids is usually very inadequate in primary schools, though more so in the poorest countries and the poorest regions. There is almost everywhere lack of properly trained teachers. In most underdeveloped countries the situation in primary schools, particularly in rural districts and the city slums where the masses live, is almost desperate.

In line with an evil tradition from pre-colonial and colonial times, and under the other limiting conditions mentioned above, teaching becomes "bookish", even though very few books and little writing paper are available to pupils.

THE SECONDARY SCHOOLS are usually somewhat better. But the attempts made in some countries to orient teaching to practical life, to impart useful skills, and in particular to give more emphasis to vocational and technical education have had relatively little success.

The increase in vocational and technical schools – though somewhat larger in percentage terms – has usually been very small, and almost nowhere has the curriculum of the general secondary schools, where the larger part of the expansion has taken place, been modernized in any appreciable manner.

This would seem astonishing as there has been agreement among political leaders and experts for a long time that in this respect a radical change was needed. Among the facts that can explain this conservatism are the scarcity of persons who can teach technical subjects, particularly as they are also needed in government and industry, where they can expect higher salaries and social status than

in the schools. Moreover, instruction in sciences and other technical and vocational subjects requires often costly laboratories and other technical aids.

But most important is the heavy weight of tradition from colonial and pre-colonial times. The dominating upper strata who are "educated" and articulate feel a vested interest in maintaining the cleft between the "educated" and the masses. The fact that a more practical vocational orientation of the secondary schools would often require participation in manual work, which is despised, and that they presumably prepare students for jobs where manual work is part of the routine, contribute to making such schools less popular than the traditional general ones.

At the tertiary level even more than at the secondary, the schools should, of course, be job-oriented and directed towards preparing the students for particular professions. Nevertheless, they mostly continue to produce an oversupply of "generalists" who have been trained in the humanities, law, social sciences, and a sort of "academic" science and who then often come to swell the ranks of underqualified administrators, clerks, and the "educated unemployed". At the same time more engineers, agricultural technicians, doctors, dentists, pharmacologists and, not least, teachers on all levels are needed. By far the most important industry in most underdeveloped countries, agriculture, is particularly disfavoured.

Underlying the difficulties in changing the structure of higher education as inherited from colonial times are again the traditional ideas of what upper class elite education should amount to.

THE VIEWS I HAVE EXPRESSED are not only my own but shared by competent observers. In India, in particular, there has been much honest and penetrating discussion of the problems, though little action. The excellent Report of the Education Commission, 1966, is outspoken: the educational system "is tending to widen the gulf between the classes and the masses". And the Commission concludes:

Indian education needs a drastic reconstruction, almost a revolution. . . . This calls for determined and large-scale action. Tinkering with the existing situation, and moving forward with faltering steps and lack of faith can make things worse than before.

The situation is not any better in other countries in South Asia, except

a few. Very little has been accomplished to improve it, in India as elsewhere.

I have had in mind that huge region of underdeveloped countries in South Asia, whose development problems I have studied intensively, and I would refer to the last chapters in the *Asian Drama* and Chapter 6 in the *Challenge of World Poverty* for a fuller treatment. A more cursory study of the literature has confirmed the impression that almost everywhere in the underdeveloped world the situation is similar. There are, it is true, important differences between countries elsewhere as indeed in South Asia. But broadly the picture is very much the same.

The historical background and many other conditioning factors are very different in Latin America, in West Asia, and in North Africa, and the considerable similarities are for this reason surprising. The one unifying common trait is the political domination by a small upper and middle class. The independent African countries south of the Sahara are still in a "becoming born" situation, but there are more than exceptional signs of the establishment of an elite class structure in many of these countries, too.

Everywhere greater equality and raising the levels of living of the masses is pronounced as a goal and almost everywhere the actual trends have been going towards greater inequality. The developments in the educational field fit into that still broader framework.

I WILL HAVE TO BE BRIEF in sketching the reforms needed. The goal to make literacy universal should be taken seriously. In the first place there is need for vigorous efforts in adult education. These efforts should be closely related to and, indeed, be an extension of the activity of the schools. The universities should be engaged in this activity, which should also bring both professors and students nearer the people and their problems.

Major emphasis should be placed on elementary education, and relatively more resources should be devoted to education at this stage. Serious attention should be given to raising the qualitative standards of the primary schools. Intensive exertions should be made to decrease the tremendous wastage on account of drop-outs and repeaters.

A crucial task is to increase the number and qualifications of trained teachers. The schools for this training should be the "power plants" that generate moral and intellectual energy among the students to prepare the people for development.

In most underdeveloped countries there should be a halt to the more rapid increase in enrolment in secondary and tertiary schools or even a temporary decrease. There is no reason why technical, vocational, and professional training should not be increased substantially within the present or even somewhat smaller secondary and tertiary educational system – providing more and better trained teachers, agricultural extension workers, and medical and para-medical personnel, to point out only a few of the fields where more trained young people are urgently needed.

Much should be added to this abstract exemplification of needed reforms. An important point to be made is that they must all be fought for, planned, and acted upon within these countries themselves. The same is true of all other reforms in the interest of greater equality as well as higher productivity – land reforms, overcoming the "soft state" and, in particular, stamping out corruption which everywhere seems to be on the increase, and deliberate population policy trying to spread birth control among the masses.

Foreign expert advice is not needed and will often be ineffective, because the experts have to work closely with the existing school establishments in the underdeveloped countries to which they are sent. As problems are so different they may even be misfits in these countries – although usually not so bluntly as in Galbraith's novel *The Triumph*, which has become a bestseller in Latin America.

The West can, of course, aid these countries by placing at their disposal free of charge or at concessional prices all sorts of physical equipment, give aid to the setting up of modern and effective teachers' training colleges and even help them to raise teachers' salaries, which are now often scandalously low. But mostly the reforms have to be radical changes in the entire school system, which can only be engineered from within.

Mary Jean Bowman

Human Resources and the Contours of Development

SOME YEARS AGO C.A. ANDERSON AND I defined development as the “process of the *generation, diffusion and realization of new opportunities*”.¹ On a number of occasions I have returned to that definition as the best statement of underlying perceptions of the meaning of “development” over much of the world today. Each word in this definition refers to an essential component of the whole and each, in the development process, is closely related to the others. The *generation* of new opportunities may seem to be a logical starting point, but however broadly or narrowly we may view “opportunities” they are not generated in a vacuum. Sustained development requires the continuous generation of new opportunities, which depends in part on the prior diffusion and realization of earlier opportunities. Development is a process of change and the dynamic stimulus of that change is in myriads of innovative acts, big or small, technical or organizational. The *diffusion* of opportunities is equally essential to genuine, sustained development. The proliferation of a privileged bureaucracy living in a “modern” world apart from a vast unchanging majority of a population is not development and may even check or block real progress. Nor is oil wealth in a few hands development, though such wealth can of course provide a financial base for investments – including investments in people – that may help generate development. Finally, the *realization* of opportunities in

¹ Mary Jean Bowman and C. Arnold Anderson in James Mattox (ed.), *Problems of Chronically Depressed Areas*, Raleigh, North Carolina, Agricultural Policy Institute of North Carolina State University and Tennessee Valley Authority, 1965, pp. 13-22.

action is of course essential. Until opportunities are both perceived and acted upon, “development” is only a potential, and without action that potential may wither away.

This way of looking at development leads directly into three broad themes that will be discussed in the following pages: (1) education as a people-changing process and the attributes of “development” man; (2) characteristics of communication networks and “deficit troughs” in the diffusion of information and opportunity; (3) gaps and continuities in labour markets and the acquisition of technical and entrepreneurial “know-how”. Despite some common elements, patterns of economic development can differ substantially from one time and place to another. It is clear, however, that particular “contours” of development and continuities and gaps in the formation and utilization of human resources go hand in hand.

1. EDUCATION, INFORMATION, AND DEVELOPMENT MAN*

EVERYWHERE, WHATEVER THE DIFFERENCES from one place and time to another, development entails changes in ways of doing things. This is in part, but only in part, a matter of changes in technology. It is equally a matter of changes in the ways in which activities are organized. Moreover, in all societies development has entailed increasing complexity of requirements in the recording and transmission of information. One of Max Weber’s most penetrating insights into the causes and conditions of economic development was his emphasis on the development of techniques in accounting, though accounting as he knew it is only a small part of the development of internal and external information systems. These two things – multidimensional innovative change, and increasingly complex demands on more formal information systems – have profound, two-way, cause and effect relationships with the formation and utilization of human resources. In this section I will stress especially the importance of abilities to cope with and initiate change as the essence of “development man”, considering transmission of information in a limited sense only. Sections II and III will give more explicit attention to communication networks and to internal information systems.

*Both this section and section II, especially the latter, draw heavily on my *Rural People and Rural Economic Development* for the International Institute for Educational Planning, Paris, October 1975.

The Attributes of "Development Man"

Whatever the particulars of his capabilities, the essence of development man is his (or her) readiness and ability to adapt to change and to grasp or to create new opportunities. It may be helpful to distinguish several sorts of capabilities within the wide range of development attributes.

(1) The simplest of these attributes will be relevant as an element in the life cycle of learning and doing even in an essentially static society. This is the development of speed and efficiency in the acquisition of new skills or the adoption of a new practice when what needs to be done is explicated and demonstrated in unambiguous terms. This first modest but basic level of *adaptability* has received slow but increasing recognition in the modern literature on manpower planning as practitioners have come to face up to problems of skill obsolescence and to take a somewhat more human view – recognizing that in one way or another we are educating people, not producing finished skill packages to be employed and deployed in unchanged ways over an ensuing forty to fifty years. This sort of awareness has been the first step in recognition by many "experts" of a fact that has been widely appreciated intuitively: the first requirement in preparing people to live in a world of change must be the inculcation of increased capacities to continue to learn. The formal pursuit of "recurrent education" is no substitute for initial learning to learn.

(2) In (1) the emphasis was on the relatively passive ability to adapt to change. There is a more active aspect of the attributes of development man: *ingenuity in the creation of new opportunities or new ways of doing things* in response to new opportunities. What is important in most LDCs today is not giants of innovative entrepreneurship, but the ingenuity of ordinary people challenged by new opportunities and seeking to overcome obstacles. This may be a matter of ingenuity in finding or creating ways to acquire skills when the more formal, generally visible channels are restricted, their gates crowded. Obviously, included will be ingenuity of a humble craftsman in making something better or different out of whatever materials are available to him. But it can also be ingenuity in overcoming or getting around economic barriers to trade – often barriers that have been governmentally imposed – and whether the overcoming is done legally or illegally. At a more sophisticated level, we find ingenuity in redesigning production processes or in working out new arrangements for buying and selling, or in the development of new internal

information systems for the control and monitoring of production in a large, complex enterprise. Clearly, the education or training needed for performance at these various levels of complexity and sophistication can range from a pre-industrial apprenticeship to the highest levels of schooling in accountancy and enterprise economics. However, the upper extremes in formal education geared to the operation of huge enterprises is not what is most needed to generate and sustain development of the LDCs.

(3) Just as category (1) shaded over into (2), so do both of these [but especially (2)] shade over into the third: *efficiency in acquiring information and in its interpretation for allocative decisions*. This is important whether the decision-maker's domain is agriculture, non-farm enterprise, or a household, and whether in private, collective, or governmental agencies. This is the core of what T.W. Schultz has in mind when he speaks of "the ability to deal with disequilibria".² That concept had its origins in studies of what determines productivity in agriculture. Schultz contrasted an old, static traditional agriculture with an agriculture that is being transformed.³ The scope for exercise of "the ability to deal with disequilibria" (or, in more limited, mundane language, to make "allocative decisions") depends on the gaps between what is being done and what is becoming possible. It depends, in other words, on the magnitude of the disequilibria that are repeatedly generated with changing markets and experimental research. Clifton Wharton expressed this idea some years ago in specifying what is needed in education for agricultural progress: "Thus, the divergence between the actual levels of economisation and the optimum levels, as determined by the logic of economics, provides a crude measure of the exploitable gap for achieving more rapid rates of growth".⁴ Evidently, whatever the economic domain the search for and identification of opportunities must be an important part of dealing with disequilibria.

² For a broad statement of this argument see T.W. Schultz, "The Value of the Ability to Deal with Disequilibria", *Journal of Economic Literature*, Vol. XII, No. 3, September 1975.

³ See T.W. Schultz, *Transforming Traditional Agriculture*, Yale University Press, New Haven, 1967.

⁴ Clifton Wharton, "Education and Agricultural Growth: the Role of Education in Early Stage Agriculture", in C. Arnold Anderson and Mary Jean Bowman (eds.), *Education and Economic Development*, Aldine Press, Chicago, 1965.

Concerning "Development Woman"

Although everything said thus far could apply to women as to men, there are some important differences associated with the roles a society defines by sex and degrees of sharing and of flexibility in assignments of responsibilities. Even a preliminary treatment of this complex topic would require a long essay. For present purposes it must suffice to state very briefly a few main points.

(1) Education (formal or informal) of women for participation in development is meaningful only as conditions permit women to apply capabilities and talents in dynamic adjustments. This is true of men also, in that other supportive conditions must be present, but there are more constraints on women's options in most societies. However, those constraints are never fixed for all time, and one of the developments that alter the constraints in greater or lesser degree is women's education. Moreover, women are active participants with men in a wide range of decisions in many societies, whether in agriculture, trade, or other forms of production, child-bearing and child care aside.

(2) For the general population of an LDC, acquisition of literacy may be *more* important for women than for men. This is not just a question of equity or equalization of opportunity; it is a matter of enlistment of half of the adult population in the process of development. There are two reasons for the special importance of full literacy among women. First of all, and most fundamental, is the fact that women are rarely as full participants as men in informal communication networks or "information fields" that could integrate them into the flow of on-going societal change. Literacy, accompanied by at least some minimum of newspapers and other reading materials, is for women an even more indispensable window into the surrounding society than among otherwise comparable men. Second, without the support of this access to horizons beyond the household and the local channels of communication among women, there is a tendency to a progressive drift of decision-making responsibilities away from women even within agriculture (and trade, where that has been a significant women's activity). The newer, more modernized activities tend to become increasingly a male prerogative. One of the results where this happens is an increasing gap between the economic productivity of men and women, with progressively greater underutilisation of women's potentials. This has not been a universal phenomenon, but it is well documented for some societies, and it tends to be associated

with relatively high rates of illiteracy among females.

(3) Starting points in prior informal education and experience are crucial for both men and women, but especially crucial perhaps in conditioning women to readiness for dynamic adaptation and development roles. Among the important informal aspects of the education base, these deserve explicit mention: (a) degree of control or authority, or active participation in decision-making with respect to use of resources in the household economy; (b) nature and extent of experience in the public domain – how far this extends beyond strictly women's trading in traditional products, for example; and (c) experience in group activities and roles of leadership in economic and political activities of women's groups (literate or illiterate, and informally or formally organized).

(4) Whatever the roles of women relative to men in determining the educational and occupational future of their sons and daughters, there can hardly be any questioning of their importance for the nutrition and health of young children, or their involvement (male vasectomy aside) in family planning and fertility control, both of which are of obvious concern in India, as in many other nations. T.W. Schultz developed his theme of "ability to deal with disequilibria" in applications to both men and women, in household as in other activities. He provides a tidy summing up that is oriented to women and their education:⁵

... it is the wide array of effects of the education of females that the investors in education in the developing countries can ill afford to overlook. The organizational efficiency of the household and its contribution to family consumption appears to depend in substantial part on the level of schooling of the women. Most women in the developing countries are poorly equipped in terms of the schooling that is required to manage their households skilfully, in taking advantage of new technical information with respect to nutrition, health, and child care. Another favourable effect of the schooling of women is their ability to decode, interpret, and successfully adopt the new, superior contraceptive techniques. The acquisition of more schooling by females tends to raise the age of marriage, a potent force in reducing fertility.... The most important effect of schooling of females may well be the special benefit that arises out of the marked advantage that children derive from being reared in homes where the mothers have this schooling.

5 T.W. Schultz, "A Framework for Land Economics – The Long View", *Journal of Farm Economics*, Vol. 33, May 1951, pp. 204-215.

Human Resources and the Transmission of Information

To understand processes of development it is important to distinguish three aspects of learning even though, again, the boundaries among them are not clear-cut.

(1) Education proper is a deliberate or purposive people-changing process. This is not to say that there must be, or that in fact there ever is, a tidy matching of intents and results. It is to distinguish, however, between the totality of human acculturation and incidental influences on what people are and become and more *deliberate* endeavours (including "self-education") to alter or enlarge a person's propensities and capabilities. Pragmatically, it is important to distinguish also between education as a deliberate people-changing process and the changes in capabilities that stem from experience in a man's (or woman's) working life – even when there has been deliberate choice of an occupation or job that carries with it a large learning potential as against a "dead-end" job, however highly paid initially. Education for development is much more than learning to do particular things. It is people-enlarging. In brief, it enlarges abilities to adapt to and to participate in the generation of change – the essential capabilities of development man. How far formal schooling has these effects will vary from one context to another, with what happens both in schools and outside of schools. Everywhere, however, certain basic sorts of learning in schools is people-enlarging, whether the potentials created are subsequently used and further developed, or are allowed to wither away.

(2) Learning through experience as a people-changing process. In greater or lesser degree this is universal, whether or not deliberate choices are made. The important questions and problems pertaining to this aspect of human resource development will be discussed primarily in Section III.

(3) In contrast to (1) and (2), the transmission of information is not in any important degree a "people-changing process". It may be useful to know that fertilizer is now available at the village store, or that the price of cotton textile has risen, or that railroad workers are on strike. However, the recipient of such information is not changed. But as the content of the information becomes more complex it can be assimilated only by the application of skills already acquired (by prior education) in the searching out and interpretation of information. Fundamentally, education and the transmission of information are complements.

II. INFORMATION FIELDS, RESISTANCES, AND AGRICULTURAL PROGRESS

A SPECIAL EXAMINATION OF WHAT IS KNOWN about conditions and strategies for progress in agriculture is of major interest in its own right, given the critical importance of agriculture in the economies of most LDCs. Furthermore, it is easier to see some important more general aspects of the interplay among human capabilities, the transmission of information, and other essential conditions for economic progress by first taking agriculture as an illustrative case than by starting with other sectors of an economy. The groundwork for this analysis has been partially laid out in Section I, but a major further step can be taken by examination of the analytical model laid out by Hägerstrand, whose seminal work on the diffusion of innovations has won world acclaim.

The Hägerstrand Model

Hägerstrand's formulation has two main components: (a) an analysis of the nature and operation of "information fields", and (b) "resistances" (or conversely) to changing one's behaviour in the light of information received.⁶

"Resistances" include all those aspects of a situation that inhibit (or support) positive action in response to a "telling". Economic analyses of the adoption of a new practice – as planting a new variety of wheat, once farmers learn about the new variety – are analyses of a part of what Hägerstrand would classify under "resistances". If the new seed is suited to the locality, the complementary inputs are available at a reasonable price, and prospects for profits are good, then the new seed may be widely adopted. On the other hand, if profit prospects are poor or the risk factor is too great, farmers will hold back. Similarly, they may respond in only a very limited degree, or not at all, in the growth of a cash crop where transportation facilities are poor or governments are squeezing profit possibilities by heavy taxation or low ceilings on prices paid by monopolistic agricultural marketing boards. Despite investments in agricultural research and extension services, many governments have overtaxed agriculture. They have also discouraged

⁶ Torsten Hägerstrand, *Innovation Diffusion as a Spatial Process*, University of Chicago Press, Chicago, 1968; translation of the Swedish original published in 1953. See also his "Quantitative Techniques for Analysis of the Spread of Information and Technology", in C. Arnold Anderson and Mary Jean Bowman (eds.), *op. cit.*

village traders while inflating the ambitions of ordinary people to do other things through protective and subsidy programmes that distort the signals given to individuals. None of these actions encourages the development of ordinary people, or of the rural economy, or of the informal sectors of economic activity.

Among “resistances” we must include also disinclinations to undertake a task that is unfamiliar, or one that seems to threaten established personal relationships. Limited education and lack of ability to decode the information contained in a “telling” and to interpret it for complex decisions is obviously a discouragement to innovative behaviour. Negative factors raise the chances of failure and diminish ability to deal with risk and to minimize it. Conversely, education, supportive institutions for the provision of credit, and adequate infrastructures in transportation, irrigation, and so on are favourable to the translation of information into improved practices. All of this and more is encompassed in Hägerstrand’s “resistances”, but he does very little to develop that side of his model.

The other side of the model, “information fields”, is highly developed, and it is from that part of Hägerstrand’s work that we have the most to learn. “Information fields” are informal communication networks as distinct from the public coverage of mass media such as radio, television, and newspapers or other publications. District spatial patterns in the operation of information fields have been identified over a long time span in Sweden, and applications of the model elsewhere have revealed the same essential characteristics.

(1) Direct interpersonal communications or face-to-face “tellings” play a powerful part in the communication of information and, given exogenously favourable conditions, in the assimilation of information and in its effect on the adoption of new behaviour. It has been shown that this basic pattern of communication pervades not only the simple, traditionalist societies in which people tend to have unspecialized roles and to interact with each other as total persons, the pattern is present also in societies characterized by complex specialization and by many formal interaction networks of the most impersonal sort. Even where mass media do have an impact, the information so transmitted is mediated through personal communications. This is not just a matter of communication networks in a small-scale rural society. Human propensities to rely ultimately on face-to-face interactions are easily observed, for example, in the operation of cliques in recruitment of high-level personnel, and also the personal communications through

which labourers in a firm pass on messages about available jobs on the one hand, reliable candidates for those jobs on the other. These are not just perverse exclusivism; they may be very efficient search processes in many cases.

(2) Spatial patterns in networks of communication are very stable over long periods of time. This is shown, for example, in the stability of migration patterns when examined in minute detail. The communication patterns display major and minor nodes from which flows of information go out to other areas. There also is persistence in the patterns in which communications jump across intervening spaces from one centre to another, and in the location of “deficit troughs” through which very little interpersonal communication occurs. There is strong evidence to indicate that disruption of these patterns, once they become established, is extremely difficult. These findings have important implications for rural development policies in less developed countries.

Most fundamental is the fact that old traditional routes of interpersonal communications continue to influence these flows even in the changing situations of recent decades. But these patterns are not totally immutable. In the early stages of economic development there are modifications that come in turn to have permanent effects. There may be some important long-term policy implications in this fact. How difficult it is to go directly against the underlying patterns has been demonstrated repeatedly, none the less. An extremely important implication is that the speed with which new ideas spread and the areas they first reach will depend significantly on strategies in the location of agencies for the dissemination of information and the placing of pilot demonstrations.

(3) The spatial structures of information fields have a wider geographic spread for some sorts of messages than for others. This is related to the fact that the structure of information flows is different for various kinds of groups. The most highly educated typically participate in more complex information fields that have a larger geographic range. This is as true for the LDCs as for more developed nations. It is related to findings concerning the relation between proportions of educated people in an area and rates of adoption of new practices in agriculture. New ideas move more rapidly across greater distances when there are many educated senders and receivers

of information.⁷

The fact that information fields have socio-economic as well as spatial dimensions raises important questions as to whether, and under what circumstances, localized information fields will carry messages from better situated and more highly educated individuals to their neighbours. When, on the other hand, will we find "deficit troughs" in communication across social or across geographic space?

Closely related to these last questions (though not part of Hägerstrand's model) is the concept of "interstitial persons" and the related concept of "cultural bridge roles".⁸ Each of these concepts has both geographic and social status dimensions. It is not difficult to identify categories of individuals who occupy interstitial places between the cultures and activities of different geographic places and different socio-economic groups in a society. But not all of these sorts of interstitial persons serve the cultural bridge function in the same degree, and some scarcely serve it at all. Indeed, some never bridge the gaps even for themselves. The anomalous position of school teachers in many rural settings is an extreme example of the tensions and discontinuities that may arise. Singleton's observations on teachers in the Philippines and in Thailand⁹ illustrate this problem very strikingly, and although the context is quite different analogous problems have been experienced in Eastern Kentucky in the United States. Many years ago I observed the same phenomenon among the "medicine men" on the Navaho Indian reservation, along with the fact that an exceptional individual can have a remarkable impact.¹⁰ Plunkett and I traced out these phenomena for a diverse array of "interstitial persons" in Eastern Kentucky, identifying the extent of their associations with and knowledge of "the outside" along with

7 We must be careful here to recognize the amazing efficiency of the "grapevines" that carry information with remarkable speed over long distances among illiterate populations. This process has often been observed in the quick response of migrant workers to shifts in job opportunities. Contrasts in spatial structures of information fields depend as much on content of "tellings" as on who are the transmitters and the recipients.

8 Both of these concepts have a central place in H. Dudley Plunkett and Mary Jean Bowman, *Elites and Change in the Kentucky Mountains*, the University Press of Kentucky, Lexington, Kentucky, 1973.

9 John Singleton, "Schools and Rural Development: An Anthropological Approach", in Philip Foster and James R. Sheffield (eds.), *Education and Rural Development*, Evans Brothers Ltd., London, 1974, pp. 117-136.

10 *Op. cit.*

factors that seem to determine readiness of local people to receive messages from some groups of interstitial persons more readily than from others. These patterns add new dimensions to Hägerstrand's model, but are fully consistent with his basic findings.

These observations must raise the question for strategies in the LDCs: are there important opportunities for using existing informal communication linkages that typically are overlooked in plans laid out by "experts" in central offices? Recent attempts to strengthen the so-called decentralized planning in a number of LDCs may be helpful here, though so far as I am aware there has as yet been little effort to tie these activities into informal networks of communication.

Finally, before turning more explicitly to agriculture, it must be emphasized that communication networks and deficit troughs constitute an important aspect of the functioning of large and of small non-farm enterprises. Variations in those patterns are related in subtle ways to "the problem of economic dualism" and the invisibility to many academicians and bureaucrats of what goes on in the informal sectors of an economy, discussed in Section III.

Target Groups in Education for Agriculture

Education and the dissemination of information for agriculture is not just a matter of education for farmers and for extension agents. There are at least five relevant target groups: (1) the farmers themselves, (2) those who serve farmers directly (as extension agents, community development workers, and so on), (3) those who serve farmers indirectly as buyers and sellers of what farmers produce and use in both goods and services (including managers of marketing boards and cooperatives), (4) those who will engage in systematic agricultural research, to extend the possibilities open to farmers in various types of agricultural areas, and (5) those who will become the leaders and makers of policies that significantly affect the conditions within which farmers operate. [This list is from Wharton except that I have added item (4).] Although Wharton emphasized high-level professional agricultural training for the leaders and policy-makers, we might view the fifth target population more broadly; some understanding of agricultural conditions and problems could well have a place in the general education of all those who are likely to rise to positions of influence in a nation the majority of whose population is rural.

A first necessity of constructive thinking about education for agricultural development is respect for the peasant farmer. Policy-

makers need to appreciate the shrewdness of peasants' decisions within the constraints of the economic setting and the knowledge available to them. One can still add to horror tales of the myopia of "experts" of various sorts who try unsuccessfully to persuade farmers to adopt practices that are in fact not suitable. Sometimes the recommendations ignore the demands of the new processes on farmers' time at periods when time is short. (There is a saying in Japan that "at harvest time they put the cats to work". Underemployment among farmers part of the time does not mean underemployment all of the time.) More often, in past years there has been inadequate attention to the risks that a new practice might entail for the farmer; when they take a wait-and-see attitude on new things, farmers are realistic; not just stubbornly conservative. These comments on the Puebla project in Mexico are worth quoting:¹¹

Whether or not the above "opportunity cost" and "risk" hypotheses hold in the Puebla case (which we suspect they do), they certainly are relevant to many other agricultural situations and appear to have been important blind spots in many well-intentioned but abortive efforts to encourage farmers to increase production. Perhaps the most important lesson of the initial period was that agricultural experts who set out to help small farmers are well advised to find out first of all what practical economic and related factors in the particular situation enter into the farmer's decision-making.

But what of the education of the farmer himself? A basic source of change in agriculture is advance on a wide front in scientific knowledge – ranging from the chemical and physical sciences to hydraulic engineering, among other things. The illiterate farmer may be very efficient within the traditional setting, and there is plenty of evidence to show that farmers quickly begin to increase production of cash crops with which they are familiar when markets for those crops are strong. But to take the lead in coping with new inputs and ways of combining them, usually men need schooling; the extension services cannot substitute for the people-changing effect of schools at this fundamental level. Elementary schooling becomes rewarding when carried far enough that literacy is firmly established.

This brings us to questions of substitution and complementarity among research, farmers' schooling, and the agencies that

11 Philip H. Coombs and Manzoor Ahmed, *Attacking Rural Poverty: How Non-Formal Education Can Help*, Johns-Hopkins University Press, Baltimore, Md., 1974, p. 108.

disseminate information. There are related implications for the education of those participating in diverse ways, directly and indirectly, in the agricultural economy. Empirical investigations unavoidably take existing agencies and their operations as these are or as they have been, not as they might be.

Substitution and Complementarities among Schooling, Extension, and Research

Systematic, sophisticated analyses of relationships among farmers' education, extension activities, and agricultural research have been coming into full flower during the past few years. These analyses are being extended to explore new agricultural populations and to identify more precisely the processes at work. This research (which has come out of agricultural economics, not education) began in the United States, but then moved to LDCs. There has been some work along these lines in India, in Japan, Korea, and Taiwan, in Brazil and Colombia, and in Kenya, and most recently in the Philippines and again in India. The chief issues raised and the main findings to the present time can be summarized briefly.

(1) Effects of research on innovation in agriculture are complementary with effects of both extension work and farmers' schooling. The variables used for research activities are a direct policy interest, since investments in research are a major source of the knowledge that permits improvements in farming – though we must not underestimate the value of the small innovations that ingenious farmers make themselves under favourable circumstances. Some of the most recent studies (most notably by Robert Evenson) have refined this analysis, to identify the differential effects of research that is pin-pointed to the conditions of a particular area, research that is focused on highly comparable areas, and more general research activities. But the research variable is used also as a proxy variable for the gaps that arise between established practices and economically optimal ones. Where it has been possible to obtain a somewhat more direct measure of the relative magnitude of that gap, the "gap variable" has given the same statistical interaction results with extension activities and farmers' education as the variables that measure research.

The fact that everywhere researchers have found a complementary relationship between research and extension work in effects on the adoption of new practices and on increases in agricultural productivity

was predictable enough. If we accept the evidence that farmers are usually quite shrewd in their economic behaviour, an "extension system" must depend on an effective research back-up if there is to be anything to extend.

The observed complementarity in effects on the adoption of new practices and on production between research activity and farmers' schooling supports the theoretical hypothesis. *Farmers' schooling pays off in accelerated improvements where there are relevant advances in scientific knowledge* (given the other necessary supportive conditions); *it does not pay off where there is no such advance*. It has also become clear that if research is to bring a wide diffusion of agricultural progress, it must itself be localized to particular types of situations. We are coming to recognize that the "Green Revolution" was not much of a revolution; many advances had been made before, and the results from the first phase of the Green Revolution were limited to particular physiographic and soil conditions.

The stimulus of schooling to more rapid adoption of suitable innovations and to improvement in productivity is not a statistical fiction arising solely from the positive association between schooling and size of farm. On the other hand, generally new practices appear first on larger farms. In some cases they have not been suited to the small holdings. The larger farmers have more incentive to invest time and effort (and sometimes cash) in the acquisition of information, they have somewhat greater cushioning against risk, and they can often try things out in a small way before committing themselves to a major change. Many small farmers cannot afford to take the risks, even when they are fully informed about the new developments.

(2) Inter-relationships between benefits of extension activities and of schooling are more complex. They seem to depend upon both the level of schooling over which variability is being observed and the nature of the extension activity. When we are contrasting literate with illiterate farmers, extension activities seem to be complementary with the rate of literacy across districts or villages as respects adoption of new practices. Only farmers with some basic readiness to receive, assimilate, and act upon new information are *initially* benefited by what most extension agents do. However, extension activity and farmers' schooling have sometimes been clearly substitutive when the schooling variable distinguishes among levels of schooling – as proportions of farmers with secondary schooling (or even, in the United States, with at least some higher education). These

findings of substitution effects (where there are any clear interaction terms) are the more notable in view of the fact that there has been a well-known tendency of extension workers to deal with the relatively educated and economically successful farmers.

(3) There is evidence of spill-over effects from literate to illiterate and from more to less educated farmers within each farming community. The better educated lead in the adoption of new practices, but the lead may be short, and the advantage of the better educated farmer over his neighbour can be quickly narrowed. This is one of the reasons why naive analyses of relationships between schooling and indicators of success in farming often come out with only very weak positive correlations. What happens is an informal emergence of the lead farmer as an extension agent vis-à-vis his neighbour to the extent that their conditions of production and access to resources are sufficiently alike to make the "tellings" relevant.

Attempts to induce more rapid diffusion of new and presumably "improved" practices through farmer training centres, "animateurs" and so on have a mixed history. I suggest three main reasons: (a) Both content and pedagogy may be inappropriate for most farmers. (b) The individuals chosen for such training may not be in a position to control even what happens on their own farms or to demonstrate the value of what they have learned. This problem may reflect lack of supporting conditions in access to resources or to marketing facilities, or heavy direct or indirect taxation and so on, on the "resistance" side. Or the trainees may be the "wrong" people with respect to their place in the communication networks and the effective ordering of tellings, emphasized by Hägerstrand.¹² (c) The sorts of things that can be

¹² It is usually assumed that men should be the starting point, and unquestionably this was the initial route in the work of agricultural agents brought to the LDCs from the West. But this procedure had implications that usually have been ignored – implications both for the subsequent direction of sex roles in modern versus traditional agriculture and for efficiency in the transmission of information and the stimulation of new practices. In some of the LDCs a major part of the responsibility for agricultural production has been carried by women, and in many women are active participants in farm decisions. With important decision-making responsibilities or influences in the hands of women and a communication network among these women, disregard of their key role in agriculture might seriously fault the educational programmes. This could be the situation even where the formal education of male cultivators seems to have more effect on agricultural progress than the schooling of female cultivators, as Rati Ram found to be the case in India.

learned in a farmer training centre during a short time are not what I would call "people-changing". Information may be transmitted, but there can be relatively little formation of new skills or competencies. In consequence, beneficial effects are narrowly limited and quickly exhausted. This third point undoubtedly is related to the criticisms frequently made of extension agents: they "do too little about bringing economic knowledge to the farmer, concentrating too much on particular inputs or relatively simple alterations in production techniques". Unfortunately, the economic or "farm management" training that we may wish extension agents to purvey is not so easy to transmit, even when the agent himself has the competence he is supposed to extend. Only when farmers are well prepared to receive it, with a foundation in adequate schooling and experience of decision-making in the management of their farms, can further efforts to supplement decision-making capabilities have much promise. Neither extension work nor other out-of-school attempts at "basic education" for farmers can provide that foundation.

Maximizing the Efficiency of Information Systems

Effective transmission of information to farmers and assurance that it will be assimilated and used will be realized only when the interplay of many influences is taken into account. *We must look at agricultural development first of all from the perspective of agriculture*, rather than by taking a piecemeal look at one sort of education and information transmission, then another – even when we casually take account of the interactions just discussed. Starting from the perspective of agriculture, it is more likely, furthermore, that adequate attention will be given to what is known about the operation of information fields. Only when we think in this way are we likely to see the less obvious but often the most important links in the diffusion of information and ideas.

The most ignored agents in the transmission of ideas and information to farmers are the businessmen who sell to and buy from them. In no LDC to my knowledge have cooperative managers filled this role. The disregard of traders arises in part from mistrust, and unquestionably they do sometimes extend misinformation along with the facts. But farmers are not perennial fools, in the face of either tradesmen or officials. Cooperatives can be useful in organizing marketing more efficiently, and we need to continue trying to find ways to make them work more satisfactorily. But often this means

that more attention must be paid to preparing cooperative managers for greater communication roles.

The training of extension agents also comes into a different perspective when set in the framework of the theory of "information fields". One needs to appreciate the need not only to increase the competence of extension agents in substantive applications of knowledge, but also to bring them into closer relationships with farmers. Thus IRRI helped to prepare agents for the successful diffusion of new high-yielding rice varieties; this programme (which was itself only part of a wider effort) had two main components.¹³ One of these was changing the change agent through bringing extension workers in as participants in the rice production process all the way from land-preparation to harvesting. The other was the use of applied research plots in farmers' fields. While this particular experiment cannot be unthinkingly generalized – indeed, the prestige of the IRRI and the very direct and specific purpose of the programme were especially favourable circumstances – it does point to the importance of establishing feed-back communications for the transmission of knowledge.

Finally, we come to the problems of educating the public generally and educating future leaders in particular in the problems of the rural economy and more specifically of agriculture. Above all, it is necessary to ensure that those who make the decisions that most change the lives of farmers should be men who know what the lives of farmers are like and who know the problems they face on the ground. "Deficit troughs" must not be too deep and too wide.

III. ECONOMIC STRUCTURES AND ASSOCIATED SKILL CONTINUITIES AND DISCONTINUITIES

A MAJOR PART OF WHAT PEOPLE LEARN, in every society, is learned in association with work, whether in relatively formal education and training programmes or in informal and even quite incidental ways. Such learning is both crucial to and a product of economic development. But how much learning takes place and what is learned by whom depends on the timing of development relative to the economies of other countries and on the range of skills and enterprise

¹³ For a terse analytic discussion, see Gelia T. Castillo, "Education for Agriculture" in Philip Foster and James R. Sheffield (eds.), *Education and Rural Development*, Evans Brothers Ltd., London, 1974, pp. 311-336.

activities inherited from the past. Late entry into modern economic development, with scarcity of inherited skills and of even modest entrepreneurship is conducive to the sort of situation commonly labelled economic "dualism", and an associated distortion in the balance of human resources that emphasizes schooling and formal certification. A richer tapestry of inherited skills and entrepreneurship can facilitate, but it cannot guarantee, a smooth development with wide participation.

To pursue these generalizations into anything approximating an adequate examination of their ramifications is obviously impossible here. Instead, my remaining observations will be highly selective. First are a few remarks about the "informal" non-farm sector, in which attention is directed primarily to the small enterprises, with only passing reference to out-of-school skill acquisition. Following this, we turn to asymmetries in the development of human resources through schooling and in employment, and to some larger problems of gaps in technical and managerial know-how.

The Informal Sector

Millions of people, scattered widely over the face of the earth, have lived and are living out their years in activities in the "informal" sectors of the economy. Nevertheless, the importance of these "small" workers and enterprisers and possibilities for enlargement of their potentials have received little attention on the international scene until recent years. India has been one of the few real exceptions. More commonly, informal-sector activities have at best been the recipients of benign neglect, and often of a neglect that has been not-so-benign; in some cases there has been gross discrimination or even efforts deliberately to eradicate small-sector activities. Those who people these sectors have been to many "planners" the invisible denizens of an inefficient and presumably, passing world; Development of a viable middle ground between "modern sector" enterprises and the man who makes sandals out of automobile tires has occurred, to the extent that it has in fact occurred, by processes that have been alien to the thinking of most "central planners".

This situation has been changing in recent years. Those few who have continued to insist on the importance of informal-sector development have found increasing support from many quarters, but above all from a few quiet workers and researchers interested in what goes on in the living economy – the economy that is peopled by most

of those who are not engaged in agriculture and by many who combine farming with non-farm production (whether off the farm or in the farm household). The exceptionally fine work by Kenneth King on the "African Artisan" in Kenya¹⁴ has revealed substantial hidden processes of search for and generation of opportunities to acquire modest skills in a remarkably efficient and ingenious adjustment outside of the "protected" modern sector, and sometimes in quite direct competition with it. Suddenly census-takers are "discovering" informal-sector employment and production all across even black Africa. And the message has been getting through at last to international "experts" who broadcast each wave of new wisdom.

Unfortunately, what if anything should be done about the informal sector is not so clear, even when attention comes to be directed to that sector. The natural inclination is to try to do something in very direct ways without first working out ways of identifying "underinvestments in fields that have not caught the imagination of would-be entrepreneurs or young skilled workers".¹⁵ The analogy with agricultural marketing research is evident, but the task is much more difficult. So is that of small-business extension.

Frustrations encountered in the Indian attempts to develop a cadre of industrial extension workers, posted to community development blocks, illustrate difficulties that must arise again and again. Above all, that experience illustrates the extreme difficulties of staffing for such services, and the related problem of role definition and status within a bureaucratic structure. The technical counselling services of SSIDO in established firms of intermediate scale appear to have been much more successful, which should hardly surprise anyone. Among the "lessons of India's experience" the following should be underlined:¹⁶ (a) Training and extension services for small-scale

14 *The African Artisan* appeared as a mimeographed volume at the University of Edinburgh, Centre of African Studies, 1975. King has published a number of articles on this and related subjects. One of the most interesting is his "Indo-African Skill Transfer in an East African Economy", in *African Affairs* Vol. 74, No. 294, January 1975, pp. 65-71.

15 The quotation is from Clifford Gilpin and Sven Grabe, "Nigeria: Programs for Small Industry Enterprisers and Journeymen", in Manzoor Ahmed and Philip H. Coombs (eds.), *Education for Rural Development*. Praeger, New York, 1975, pp. 544-568.

16 These observations draw on John C. de Wilde, "India: Non-formal Education in the Development of Small Enterprise", in Ahmed and Coombs, *loc. cit.*

industry obviously can be effective only in proportion to the opportunities for profitable investment available to such industry. (b) Adequate staffing is a key problem. (c) The tendency towards an excessive dispersal of activities must be resisted. (d) Extension and training should not be allowed to degenerate into a routine government service. Similar and further related insights can be gained from a reading of the new work by Richard and Doris Taub, who conducted a careful series of interviews relating to Indian experiences in efforts to encourage small enterprises.¹⁷ Most important is documentation of the fact that types of government programmes that provide incentives or opportunities that are mainly general in nature, or provisions to ensure favourable conditions for the purchase of crucial material inputs have far more promise than more direct attempts to foster particular activities. Other crucial lessons specified by the Taubs are the importance of avoiding sudden shifts in the details of a programme, the dysfunctionality of excessive government red tape, the need for formal schooling as a basic condition of successful expansionary enterprise, and the need for much more understanding and interest in effective communication of government agents with the less sophisticated enterprisers. Lacking schooling, the small enterpriser is severely handicapped in "dealing with disequilibria", and face-to-face meetings do not eliminate societal "deficit troughs" in understanding without further efforts to communicate.

Despite these citations from studies in India, so far as I am aware the first systematic study of *how* schooling and other sorts of education (or training) affect the behaviour of independent enterprisers is the work by T.K. Koh, just completed.¹⁸ His study refers to independent businessmen in Japan, most of whom employed less than thirty non-family workers, with a concentration around half of that figure. From Koh's rich analysis I draw only a few points.

Looking at the entire sample, regardless of industry, there were unambiguous positive associations between how much schooling a man had, his use of formal channels of communication, and the frequency with which he innovated in his business. Types of

17 Richard P. Taub and Doris L. Taub, *The Promotion of Entrepreneurship in a Socialist Society* (in press).

18 Tsu Koon Koh, *Education and the Behavior of Small Enterprisers in Japan* (Unpublished Ph.D. dissertation, University of Chicago, 1977).

innovations distinguished were: (a) changes in processing techniques, (b) changes in marketing practices (on either the buying or selling side), and (c) changes in organization or in control systems. Each type of innovative behaviour was associated with schooling in a different way. Only the most schooled showed much organization innovation, whatever the industry. Changes in processing techniques were less related to enterprisers' schooling. It was the craftsmen, as we should expect, who most often reported apprentice training (formal or informal) and who had the lowest average initial schooling – though most even of the least schooled had eight or nine years. Moreover, the craftsmen made extensive use of formal sources of information relevant to their trades. Among the craftsmen schooling beyond the standard compulsory years had little effect on communications or on innovation. By contrast, among manufacturers schooling had quite complex effects. At the top, going to university greatly increased the intensity of *informal* sources of information and innovative ideas: the school-clique information fields are extremely important among these men. Attending a technical or commercial upper-secondary school favoured both greater use of formal communication and increased innovative activity – in processing techniques among manufacturers and in marketing practices among wholesalers or retailers.

Obviously these results cannot be generalized to the LDCs, but they are suggestive. These findings too are consistent with the more extensive findings in research on agriculture even though the details are very different. They are consistent with evidence from more casual assessments of efforts to foster small-scale enterprise and with the greater success in counselling on technical than on management matters. Transmission of information is effective only when the target groups are qualified to receive and interpret it for their own decision-making purposes. From observations such as these we should learn something not only about the role of schooling in and for entrepreneurship, but also about the selection of messages and the agents of their transmission in attempts to increase the capabilities and improve the performance of small enterprisers in the LDCs.

Schooling and the Out-of-School Acquisition of Know-How

Tendencies to underestimate the importance of out-of-school training and experience in the acquisition of critical sorts of know-how have not been limited to perceptions of what goes on in the informal sectors. This is not just a failure, for example, to *see* the education

continuously taking place in the lives of small repair shops along a dusty Indian road – or even to understand the quite intricate mesh of informal learning and earning activities delineated by Kenneth King. It is an underestimation of what goes on in the acquisition of competence at much higher levels. At the same time, there has been a strong “modern sector” bias towards schooling, unmatched in most cases by any real concern about the implications of schooling (to whatever level) for activities in less bureaucratic establishments.

Biases towards bigness in industry (and often in government) and biases in favour of an emphasis on formal schooling and certification have gone hand in hand for several reasons, two of which are obvious enough. It is much easier for governments and loan agencies to assess a single large industrial project than to assess (and “process”) an equal investment in a galaxy of small undertakings. The large enterprise is the one that is most likely to be financed even when, taken together, the smaller ones would provide more employment, more entrepreneurial learning, and more aggregate increases in output over time. Similarly, it is relatively easy for the new political elites of an ex-colony to import a familiar school system, with an ordered examination structure – often more rigid and unresponsive to needs than the metropole system taken as a model. It is relatively easy also to continue with a traditional formal system where such a system exists, as it does and has done, for example, in Greece. Bolder policies that would shake up entrenched hierarchies and support greater diversity, encouraging a creatively disorderly educational dynamic, are much more difficult to conceive and to carry through. But this is only part of the story.

It is of the essence of development that economic life always is in disequilibrium, as one change stimulates another. One way to look at it is in terms of a sequence of leads and lags in the supplies of factors that contribute to development. In many countries today it is clear that formal schooling has on the whole led development, as it did historically in the United States and Sweden, but not in England. Such leads can be considerable, since the amount of schooling that can be provided is not bound up in any direct way with the functioning of the rest of the economy. By contrast, the spread of capabilities and know-how acquired only by experience at work cannot get very far ahead of economic development itself. Neither can the construction and utilization of physical capital get too far out of line with the

development of the human resources capable of working with it.¹⁹ This means that there is an inherent asymmetry in the leads and lags of development and in the particular technologies and forms of organization that emerge.

The circular development dilemma is evident, but just how important is that dilemma in fact? The answer depends (1) on how far schooling can be a substitute for experience in the acquisition of know-how, (2) on the kinds of things for which experience is most essential, and (3) on available ways of circumventing the initial problem of forming a cadre of persons with the missing competencies.

There is cumulative evidence suggesting that in a long view schooling and out-of-school learning associated with work experience are in general complementary. However, there is also scope for substitution in the sphere of training. I have written systematically and at some length on the economics and the pedagogy of this matter.²⁰ Here it must suffice merely to assert that two of the sorts of competence that are of fundamental importance for sustained development depend crucially on learning through experience, whatever the complementary contributions from formal schooling may be. One of these is the technical know-how that enables a man to identify why something is going wrong and to get it operating again. Such a man has the understanding of a production process that enables him to solve technical problems as they arise. Development of this capability to a high level that can cope with the unexpected difficulties that always arise where there is rapid technological change requires both experience and a grasp of general theoretical principles in the engineering disciplines.

Second is the social-organizational know-how that is required of managers and enterprisers once a business extends beyond the range of close personal communication. This is more than the formal internal information system required for operation of a complex

19 On this problem, see Mary Jean Bowman, “Post-school Learning and Human Resource Accounting”, *Review of Income and Wealth*, Income and Wealth Series 20, No. 4, December 1974. That analysis was anticipated much earlier, along with relationships between gaps in know-how and tendencies towards economic dualism, in my essay “From Guilds to Infant Training Industries”, in Anderson and Bowman (eds.), *op. cit.*, pp. 98-129.

20 The first of these analyses appeared under the title “Decisions for Vocational Education, an Economist’s View”, in J. Kaufmann and C. Schaefer, *Vocational Education*, Heath Inc., Lexington, 1970.

enterprise, which makes fewer demands on learning through experience even if it may call for more formal training. Social-political know-how is among the most subtle capabilities and the most difficult to acquire when they differ from traditional patterns. Such disparities become increasingly important as the structure of skills encompassed in the operation of an enterprise becomes increasingly complex and the tiers of middle management multiply. Kilby's comments on how difficult it is to form entrepreneurial skills are worth quoting here.²¹

Our thesis concerning entrepreneurial task performance is as follows: where similar activities have existed in traditional or semi-traditional society, as in the case of exchange relationships and "political administration", those social mechanisms which transmit the required skills and attitudes from one generation to the next provide the necessary conditioning for effective performance in parallel if somewhat more complex roles in the modern entrepreneurial setting. Where there are no transmutable antecedent roles, particularly if the absence of a positive tradition is reinforced by inhibitory social structure influences. . . , then we may expect low levels of intensity and proficiency in carrying out these particular functions.

Kilby gives as examples the synchronization of work of various individuals or groups, controls for quality, standardization, prevention of wastage of materials, and control of production flows and inventories. Problems may be especially severe where traditional roles have been highly "diffuse" – that is, where the performance of traditional activities is "intertwined with the performance of other basic social functions. . . . This relatively heavily laden social situation is governed by canons of etiquette which preclude the use of direct sanctions to correct undesired work performance". Kilby and others have observed the strong reluctance of "superiors" in many cases to concern themselves regularly and constructively with the performance of those working under them.

The third question I cited above is particularly relevant in determining the extent of the "circular development dilemma" and its effects referred to ways of circumventing the problem. It will be easier to deal with this question if we begin by focusing on technical rather than social-organizational know-how. Furthermore, we can think more clearly on this matter if we ask: what are the opportunities and incentives to invest in the formation of these skills, and by whom?

²¹ Peter Kilby, "Hunting the Heffalump", editorial introduction to his *Entrepreneurship and Economic Development*, Free Press, New York, 1971.

While a long list of possible inventors could be drawn up, it will suffice here to look at only three: (a) the individual, (b) the private employer, and (c) the state. Skill gaps will be closed by investment in skill creation whenever one of these decision-makers perceives an opportunity to do so that promises returns commensurate with costs.

Individuals seek out learning opportunities and pay for access to such opportunities by accepting lower wages or even by outright direct money payments where conditions make this a favourable alternative. The history of apprenticeship and its metamorphosis since medieval times has illustrated this process, which is illustrated again with variations of detail and levels of skill in King's work on the African artisan, cited earlier. Every time a man chooses "a job with a future" over a dead-end job that pays more initially, he invests in himself. The problem, however, may be that within the range of individual options and ability to pay or to forgo earnings there is no one prepared to make an exchange.

Employers, in turn, will have an interest in building up the capabilities of the labour force when expected returns exceed the costs of these investments. Most of the discussion of such investments in the literature of economics has centred around the concept of "specific training", which refers to the formation of skills that are of value in a particular enterprise but not elsewhere. The reason for this emphasis is the proposition that the investor must be assured that he will be able to recoup on what he has invested in a man by employing him later on at pay below his productive contribution. This is simply the other side of the analysis of exchange between employer and employee where the employee is the investor. In practice these investments in human beings often are shared, in both initial costs and subsequent returns. But how can this fill the gaps in know-how where there is little or nothing from which to start? Aren't we right back at the circular development dilemma over again?

At this point we must take a broader view of the options open to the employer-investor. Among those options is the importation of expertise to get things going – an extremely important feature of economic development even in the history of Western Europe, not merely in the LDCs today. Importation of men with appropriate technical know-how may in fact be the only way to get some sorts of activities under way. Subsequent cohorts of men drawn from the home population may acquire the know-how with time and eventually take on the responsibilities first carried out by the foreign technicians,

whether or not the latter stay on. The only alternative, state intervention aside, may be an organization of production (and a bias towards industries) that makes little or no use of intermediate skills, and generally substitutes capital for skills except at the top of the hierarchy. This is the "non-development" extreme that characterized many mining operations in the colonies before World War II and prevails in some areas even now.

Governments have a very mixed history in their roles in the encouragement or discouragement of human resource formation. Minimum wage legislation, whatever its justification, tends to support economic dualism and to limit investments in human resource formation or to distort those investments, forcing them into inferior channels. On the other hand, governments and multi-national agencies have also stepped in to finance investments in human beings that have long-term societal returns but would not be supportable by individuals or most independent enterprises. Governments may both encourage the development of managerial competence and social-organizational know-how and discourage it by the multiplication of bureaucratic distortions and an extended bureaucratic appetite. Frequently the effects of government action have been quite different from what policy-makers intended, and undoubtedly this will continue to be the case.

Nevertheless, there should be relatively little difficulty in sorting out the more destructive and the more constructive directions of public policy if adequate attention is given to a few general propositions and their manifestations in the particular society. (1) Sustained, broadly diffused development requires basic general education that prepares men, and women, to deal with change. (2) The most elaborate apparatus for transmission of information will come to naught if the conditions for fruitful application of that information are lacking (as lack of credit facilities, or of supplies, fertilizer at a reasonable price, or of raw materials for small manufacturers). (3) The diffusion of innovations is facilitated by recognition and use of existing information fields in both geographic and social space. Ultimately the important "tellings" tend to be face to face. This universal human trait points to the importance of continuities in the development of communications that will circumvent natural "deficit troughs". (4) The informal sector is much more important for economic development than is commonly supposed, but in most countries it has received little encouragement of the general sort that could be most

conducive to progress. (5) There is need for much more consideration of how government policies may constrain, distort, or encourage increased human resource formation through investments by employers in their employees and by individuals in themselves. These are not necessarily formal sorts of programmes. Indeed, some of the most important genuine post-school investments in human beings may be largely informal, taking quite subtle forms. The greatest difficulties in the making and activation of policies conducive to development may often relate to the formation of entrepreneurial and managerial skills, where the important innovations are more institutional than technical.

C. Arnold Anderson

Why is Elementary Education Unduly Neglected?*

INTERNATIONAL CONGRESSES OVER THE LAST QUARTER CENTURY have persistently recommended that “developing” societies make sure that higher and secondary schools not be allowed to outrun elementary enrolments. Yet each successor congress acknowledged that events had gone contrary to agreed policy. “Developed” societies also experienced disappointments: because of incompetence among students at every level and among adults, expenditures for “remedial” programmes rose steadily. Paradoxically, enthusiasm for compensatory programmes for young children or for new methods in elementary education wanes rapidly. In contrast, determination to expand higher education and to assure subsidized access to it rarely lacks a popular press.

Weak or vacillating support for elementary education occurs even in societies without ethnic, racial, or caste divisions. (Conflicts over desegregation in the United States surely are a special case.) One should notice that explanations for neglect of the lower levels of school are not solely reciprocals of explanations for undue encouragement of post-elementary schools. Fostering and inhibiting factors for each kind of level of school are mainly special, if also in part merely a particularization of general policies for education.

This paper is organized under the following headings:

*It is impossible to write any essay that suitably honours a man with so long and varied an experience as Mr J.P. Naik. Perhaps once or twice in reading this essay, he or a colleague may say to himself, “So, that is why we never could make such and such a programme work well.”

1. The long time-gap between elementary education and adult use of it,
2. chronic deficiencies in the 3Rs,
3. the school and its local community,
4. teachers know which schools count most, and
5. obstacles to moving educational resources into local areas.

The long Time-Gap Between Elementary Education and Adult Use of It

THE DEMAND FOR ANY KIND OF LEVEL OF EDUCATION is derived from the uses to which the resulting skills presumably can be put. So one may say (with T.H. Marshall) that education is to be seen not as “the right of the child to go through school, but as the right of the adult citizen to have been educated”. Conventionally, elementary education is expected to instill “basic” skills. These skills are basic because (a) they can be used in many situations or activities, (b) they remain usable (with minimal practice) for a lifetime, and (c) they are a foundation on which more specialized and complex capabilities can be built. But the young children who receive this elementary education are ill-prepared to choose the most suitable form or amount of it.

Elementary instruction embodies what many persons may share: the vernaculars of language and number and popular versions of history and literature. A system of elementary schools tends to unify peoples and regions as well as to open up trans-national horizons – unless provincial versions are locked inside a barrier of language. Elementary lessons downplay what is private and exclusive, what sets fellows apart into exclusive coteries.

Attrition continually removes pupils who find elementary lessons uncongenial: perhaps they are only the more “book weary”. Those pupils who persist through elementary school are more education-prone, although in some societies or localities this differentiation emerges almost at the beginning of school. Where associations of parents are encouraged by officials or even where they emerge spontaneously, the most faithful members of them tend to regard elementary schools as mainly preparatory. Such parents may be the most loyal supporters of “the common school” even when their main attention focuses on more academic or professional schools towards which they point their own offspring. Many societies have institutionalized the free and open comprehensive elementary schools, but strong supporters of improved elementary schools may also

nourish schools that prepare youth for “uncommon” ways of life.

Parents who possess little schooling – along with the more conventional educational techniques – identify the 3Rs as “subjects” to be mastered. Indeed, there is an inherent tension between thinking of “educating the child” and organizing what is to be learned as specialized lessons and “subjects”. Those who think in terms of “subjects” tend to favour “planned” training and to have narrow horizons about opportunities. For them the “common” element in even elementary schooling tends to have little importance. One distinct exception is for such individuals to favour cultivation of “civic unity” and in vocational training to favour preparing youth to join in the economic specialities of their home localities.

Indeed, elementary schools are normally conceived to “belong” to small communities or neighbourhoods: the radius a small child can walk. These vicinal groups translate the great issues of change and development into provincial versions. Less parochial but also more specialized formulations of those great issues are to be found mainly among spokesmen for “interest groups”. Persons function in such non-primary relationships mainly by the help of what they learn in post-elementary schools.

Thinking in terms of the collective or social pay-off from education comes naturally to planners and policy-makers. Such planners spare little attention for “consumer” benefits from any sort of education, yet these have an intimate continuity with the earliest lessons in school. The planners also find it uncongenial to concede autonomy to individuals in educational or vocational choices. One might say that planners tend to be more “academic” than “education”-minded. They believe that it is “high-level” persons who know best how to overcome the constraints of poverty and backwardness. But to think in terms of planning almost inevitably is to focus on what adults do, especially on occupations. The basic intellectual skills learned in the first years of schooling become nebulous; they are so far “back” in the lives of workers that the future-minded planners overly discount the “basic” qualities of elementary education.

Chronic Deficiencies in the 3Rs

EVEN THE SEEMINGLY TRADITION-BOUND LESSONS in the earliest grades are far from uniform or homogeneous. One can divide the elements of any curriculum into types (as in the illustration below), although every lesson contains more than one of these elements.

	<i>Parochial</i>	<i>Universal</i>
Affective	1	2
Cognitive	3	4

Mathematics lessons would be made up predominantly of Type 4 materials while literature lessons would be mainly of Type 1. Any redesign of a curriculum will display new combinations of these varieties of material. Type-4 material would be more salient in the less-elementary and more specialized lessons. Where “life adjustment” aims or “national tradition” are heavily emphasized, affective elements receive disproportionate emphasis all the way into secondary or even higher schools. Predominant stress on parochial and affective elements will be largely dysfunctional if elementary lessons are relied on to maximize the contribution that pupils can make to broad “development” goals.

Local officials tend to interpret “enrichment of culture” in the narrow sense of “preservation of tradition”, and they often think in terms of divisive issues: local dialects or a regional language, adulation of provincial heroes rather than of national figures, etc. These local officials tend to be half-hearted in using elementary lessons avowedly to strengthen national ties among the populace. Where capability for creativity is viewed in elitist terms, elementary lessons will be more rote and the idea of “the open classroom” will be incomprehensible. In some societies everyone is to be schooled “to prepare for modern life”, but in even more societies elementary education is designed for those who will have little of that opportunity.

Every school system has many “functions” or effects; the following illustrative list can serve to advance the argument of the present essay:

- (a) to produce candidates for later stages of education – and teachers;
- (b) to pick out and to train a minority who will preserve the “high culture” and compete for membership in one of the elites;
- (c) to transmit the basic elements of literate culture and also to widen pupils’ horizons beyond their neighbourhood;
- (d) to supply vocational training for some individuals;
- (e) to help youth to acquire individuality and to learn how to make appropriate use of privacy.

A good system of elementary schools perhaps will be characterized mainly by elements in categories (c) and (e); in the deepest sense these are “life adjustment” goals. They are the core of “general” and of

“liberal” education. Little support can be found for the ideas of “de-schoolers” among these five functions.

The Elementary School and Its Local Community

FAMILY, NEIGHBOURHOOD, VICINITY, all these cosy words are associated with our ideas about schools for small children. The pupil community in the sense of boarding schools or any monastic corps are ideas that we associate with the schools that are attended by youth who have at least partly cut their ties with parent and kin. These distinctions among schools long predate contemporary “mass societies”. But in the “bureaucratized” and directed societies of our day, the simpler and “less important” local schools receive only casual and unsustained attention from the people who run things.

For India the sample survey has shown dramatically that distance from the average home to a secondary school is much greater than to the elementary school. Only naturally, then, the elementary school is more coloured by its immediate surroundings. And since these local settings have great stability – in linguistic predominance, in economic linkage to the school, and in family diversity of zeal or apathy for schooling – these local stabilities outweigh schemes and directives from the Central government. For decades, over much of the world, there has been evangelistic fervour for “the community school”. But a government ministry cannot produce a “local” school; the ties between locale and school cannot be observed or nourished by remote officials. No wonder that efforts to reform village schools frustrate inspectors and educational planners. It is not surprising that slogans commonly found in the “whereas” clauses in legislation about elementary education are quietly seen to be piety, not programmes. It should therefore be acceptable to say that the time to listen to renowned policy-makers is when they speak about the larger programmes; about the village school we need not listen to them.

There is a duality in the literature about schools. On the one hand, a school is supposed to “reflect” its milieu, to be a natural plant in native soil, and to be well fitted to the surrounding society. But, on the other hand, every school also is expected to foster change: not only in the long run measured in generations but by preparing workers who can boost this decade’s indexes of progress. However, elementary schools work their benefits slowly, and they can only marginally push or retard deep tides of change that already are under way. For “development”, pupils need to transcend some of their parochial

folkways, but they can do this only if they learn how to put some “distance” between their school and their home community. They need to learn how to relate their neighbourhood to the larger world. It has become fashionable to phrase problems of educational change in terms of input and output (and the many related notions). But the tone of calculated rationality in the evaluation of innovation and of productivity is not congenial to the quasi-familial atmosphere of the elementary school, however unprovincial an individual teacher may be. Quite possibly the schools for small children have advanced steadily in quality, but a statesman who would polish his name wishes to serve on commissions to reform the secondary or higher schools that have put childish things behind them.

Teachers know Which Schools count Most

THE FIRST AND BASIC MONTHS OR YEARS OF SCHOOLING largely determine what effect later schools will have on the children who live in any community. Yet to fix salaries of primary teachers at least midway on scales for all teachers would be supported by few either within the profession or among laymen. One reason has been reiterated: teachers of small children are viewed as surrogates for parents. The nurturing model, the familial and the female, and what is not too important practically are tightly associated in the public mind, to the detriment of the schools that are central to the lives of most children.

Doubtless, the status of teachers reflects the status of the families from which the pupils come. But additional reasons for the prevailing condescension towards primary teachers readily come to mind. That teacher serves the populace, not some superior part of it. One does not, in most societies, observe male teachers to be in charge of the lower grades, and the proportion of male teachers rises with the “level” of school. (This tendency partly reflects the deeply rooted prejudice against employment of wives and mothers.) Whichever be the cause and whichever the effect, until recently elementary or primary teachers used to have received all their post-elementary (or post-secondary) schooling in segregated and “non-academic” institutions. Public opinion stubbornly refuses to acknowledge that pedagogy rests on any principles of craft or science.

Unionization of teachers cannot be said unreservedly to have improved the standing of elementary teachers except perhaps in the monetary sense. In order to mobilize power for bargaining and to

combat other interest groups, teachers' associations have often focused on the multitudes: the hordes of elementary teachers. But elementary teachers typically are short-term with a heavy turnover and they wish starting salaries to have a high ratio to peak salaries. Professional interests have little time in which to germinate among such teachers. Normally also teachers oppose "division of the job" which would almost automatically raise incomes for some teachers although it would presuppose a rationale of the teacher's craft. The teachers in secondary schools prefer smaller associations attuned to their specialities. Individual secondary teachers and professors in higher schools can readily develop individual ties to officials and legislators. Among elementary teachers few except the leaders of unions have the opportunities to talk with policy-makers.

If one seeks to raise the status of elementary teachers, there are strong reasons to discourage instruction by radio or TV, and it would be wise policy to assign elementary teachers to schools outside their home districts. Over much of the Third World and even in isolated districts of advanced societies teachers have a special position. The teacher may be the only living embodiment seen by pupils who is capable of speaking about the larger world, who demonstrates daily what one can do with elementary schooling, one who shows that a person who is unlike their parents can be worthy of respect. Yet armies of planners are seeking in the name of economy to reduce the teacher to a mere tender of radio or TV. Today over much of the world children can see gripping examples of "expressive" models for behaviour at the local cinema, on radio or TV, or in comic books. Models for "instrumental" use of school lessons are rare in most of the communities of the world. But for many reasons, some of them mentioned in this paper, the influence and prestige of elementary teachers are being attenuated and undermined.

Obstacles to Moving Educational Resources into Local Areas

IN NO SOCIETY CAN "REDISTRIBUTIVE POLICIES" be said to have had more than modest success. Some of the structural reasons are familiar: e.g., presence of the more skilful claimants for services from government in just those areas that make larger per capita payments to government. Public officials normally prefer to subsidize organizations rather than individuals; this preference gives a stronger voice to programmes that serve those families who have differentiated themselves from the general populace. It is the elementary schools that

virtually everywhere receive the lowest per pupil expenditures. (To be sure, the ratios of higher to secondary or elementary expenditures per pupil vary widely among and within societies.) Yet the rate-of-return ratios tend to be lowest for tertiary and largest for elementary schools – at least after the initial years of implanting a new system of schools. Nevertheless, the sophistry that "free" schooling (without a means test) is democratic and reduces inequality is believed stubbornly in the face of logic and evidence to the contrary.

There is a familiar linkage of elementary school and neighbourhood except where ingenious equalization schemes have been adopted. This linkage enhances the congruence between socio-economic circumstances and the quality of the "common" (and non-selective) local school. Officials with a society-wide perspective have to be alert if they are to find political support for policies to help the "hardship" localities. The post-elementary schools escape many of these handicaps because their pupils do not come from the immediate environs of the school – at least not until post-elementary enrolments have become high. Whether we view them as individual families or as communities, the better-educated and more alert parents readily and quite honestly give their children what less fortunate parents expect the school to furnish.

Surely one main objective should be to bring nearly all pupils above a certain threshold of learning, for thereby all subsequent learning is made easier. (This relationship is the kernel of "mastery learning".) In most neighbourhoods, of course, some parents of elementary pupils will be motivated and capable of lifting their own child's learning above the ceiling of the tests used to calibrate mastery learning. But in most neighbourhoods there will be too few parents possessing sufficient educational zeal to lobby effectively for outside resources to be used in their village school.

Repeatedly in this essay it has been emphasized that the elementary school works mainly in the vernaculars. When fortune smiles, the teacher aided by a few parents can introduce non-parochial elements without moving over to that "distance from the local" that we expect to characterize the secondary school.

Unfortunately, where the vernacular makes up the core of the curriculum, lessons tend to become contaminated by "tribalism". Then energies and resources that might enrich the village school are diverted into quasi-educational activities. It is in order to escape these traps of ethnocentrism that many observers propose to inject more

outside resources and stricter control by the centre. But all too often these gains are procured at the cost of drying up local identification with what no longer is “our” school.

EVERY READER OF THIS ESSAY can easily identify statements by which to judge that the exposition has been too abstract. Yet motivation to write it emerged from observation of the United Nations’ failure to persuade “less developed” societies not to divert “too much” educational resources into post-elementary schools. Such a diversion often occurs where “developers” are selling the idea that agriculture should become a disappearing economic sector.

But there also are features of pedagogic lore and conclusions from teachers’ struggles for status that lead to the same neglect of elementary schools. A recent commentary on the struggle over desegregation in the United States subtly makes many of the same points about the relation of school to society, and I close with one brief quotation.

Evidently the concept of fraternity is more closely associated with the concept of society, while the concept of liberty is more closely associated with the concept of the polity. The one implies organic relationship, the other contractual relationship. . . . We have not made up our minds as to whether education is primarily a function of society or primarily a function of the state.

(L.J. Fein, *The Ecology of the Public Schools*, 1971, p. 88)

M. P. Rege

Education and Social Justice

A Conceptual Framework

THE PRINCIPLE OF DISTRIBUTIVE JUSTICE may be stated as that every member of a given community ought to have an equal share of goods unless there are relevant reasons why he should receive a greater or smaller share than some others. By “goods” is meant the things men need or want such as food, shelter, leisure, comfort, aesthetic experiences, etc. Another favoured formulation is that everyone’s share of goods ought to be proportionate to his merit or desert. While this formulation singles out merit or desert as the only reason for sanctioning unequal shares, it also implies that in matters in which considerations of merit do not enter, equal distribution of goods is the only rule that ought to prevail. Now merit can be of various sorts – e.g., moral merit, artistic or intellectual merit, and so on. In civilized societies these forms of merit generally carry with them their distinctive rewards such as the esteem in which a virtuous person is held by his fellow-men or the distinctions and honours conferred on artists or scientists with exceptional achievement to their credit. Men normally covet such rewards, which therefore constitute goods, but these are goods which are inseparably tied to various forms of personal achievement and therefore do not form a part of the social pool of goods from which everyone is to receive his proper share. Therefore, the only kind of merit which can constitute a reason for a person’s receiving a greater share of goods would seem to be the one which lies in a person’s making a greater contribution to the social pool of goods.

The principle of equality lies at the core of justice. In the absence of relevant reasons necessitating unequal distribution, goods ought to be distributed equally among all members of a community. The force of

the principle of equality is positive, not negative. It is not as though all conceivable principles of distribution being equally arbitrary and devoid of validity we accept by a kind of mental inertia the principle of equal distribution. The principle of equality is rooted in our recognition of every human being as a person who has a conception of his good. He, therefore, has an equal claim to be considered along with anyone else where the distribution of goods is concerned.

Now the good of a person includes (i) the fulfilment of his needs (ii) the satisfaction of his wants and desires, and (iii) certain forms of experience and activity which are valuable in themselves. The concept of a need is a normative concept. To say that a person has a need for *X* is to say that if he is deprived of *X* he will fall short of a condition which is to be regarded as a condition of his normal well-being. The best way to illustrate the concept of a need is, perhaps, to refer to the physical needs of a person, the fulfilment of which is a condition for his body remaining healthy. Many of the things a person needs are also things he wants but a person also has many wants which are not, strictly speaking, his needs. However, the satisfaction of the wants and desires of a person (which are not his needs) is a part of his happiness, his good at which he aims. Obviously, therefore, the needs of any person have moral priority over the mere wants or desires of any other person. If the needs of any person remain unfulfilled he will suffer a positive deficiency in his well-being. If the desires of a person have to be denied he will merely be deprived of that additional amount of good which he would have attained if they had been satisfied.

Forms of experience and activity which are intrinsically valuable are immensely satisfying to those who undergo or engage in them and are also generally valued by the community in general. However, not everyone has the necessary ability to engage in intrinsically valuable activities such as the creation of works of art or original theoretical research, though the capacity to appreciate and enjoy works of art or take delight in acquiring knowledge created by others is much more widely diffused. Just as the needs of one person have priority over the mere desires of any other person, experiences which are regarded as intrinsically valuable may also be recognized to have priority over the satisfaction of mere desires. However, the claim of needs is much more stringent than the claim of intrinsic values and is perhaps of a different kind. A rational person will recognize the priority of the need of any person over a mere desire of any other person.

In the same way it will be irrational for any person to satisfy any

desire of his at the sacrifice of any of his needs. But I do not know whether a rational person will similarly accord priority to one person's pursuit of an intrinsic value over the desires of any other person. But those persons who recognize the intrinsic value of certain forms of experience and activity may voluntarily forgo their desires or even some of their needs in order to pursue these intrinsic goods or enable those who are capable of pursuing them to do so. Men may voluntarily lead an existence which is truncated in one direction in order to pursue intrinsic values. But it appears to me that they have no moral authority to enforce a similar mutilation on others for this purpose.

IF WE IMAGINE A SITUATION in which the total stock of material resources necessary for satisfying human needs and desires were to be found in nature in a limited quantity without its being possible to increase it by productive labour, justice will lie in distributing it in such a manner that (i) all the needs of everyone are completely satisfied, and (ii) the desires of all are *equally* satisfied. It may, of course, happen that these resources are inadequate to satisfy all the needs of everyone, in which case it will be necessary to accept an order of priority among the needs together with the principle that all the prior needs of everyone will have to be completely satisfied before devoting any resources to the satisfaction of any posterior need of any person. But human beings are not merely consumers of goods. They are also producers of goods; and they have different abilities to contribute to the augmentation of the social stock of goods. If it were the case that all men had an equal ability to contribute to the stock of goods, justice would require all to share equally the burden of production, comprising labour, and carrying the load of responsibility as a kind of negative good. But some men have the capability, if they so desire, to add much more to the pool of goods available to the community for distribution than many others.

In a community consisting only of saints each person will exert himself to his utmost to increase the common stock of goods so that every person benefits. But no problem of justice will arise in a community of saints. It is only in a community of persons pursuing their individual interests that these problems arise. In such a community, human nature being what it is, it will have to be made worth a person's while to exert himself, employ his superior talents, and produce more than the average person does. At the same time, an

arrangement by which a person who produces more also receives a greater share from the social stock of goods will have to be in the interest of everyone if it is to be acceptable to them. Thus, I think, it will be rational to accept the principle, advocated by Rawls in his *A Theory of Justice* that inequalities are fair if and only if they work as part of a scheme which improves the lot of the least advantaged member of the community. In other words, unequal distribution is to be sanctioned only if in its absence the position of everyone would be worse. The more talented are to be paid more because by doing so everyone benefits.

WE MAY DISTINGUISH PRIMARY SOCIAL GOODS such as rights and liberties, opportunities and powers, income and wealth from other goods because these are the things a rational man wants whatever else he may want and because they enable men to carry out their intentions and advance their ends, whatever these ends may be. One important social good consists, of course, of powers and liberties connected with citizenship and it goes without saying that this good must be shared equally by all. Any political arrangement in which all members of a community are not equal citizens enjoying the same powers and liberties is unjust.

But persons may differ in respect of the other positions they hold in a community with which are connected their expectations of acquiring other primary social goods – e.g., unskilled labourers, members of the civil service, engineers, etc. It will obviously be unjust if these positions were not equally open to all. Positions must not be merely open in a formal sense but all must have a fair chance to attain them. In other words, those who are at the same level of talent and ability and have the same willingness to use them should have the same prospects of success regardless of their initial place in the social system. Now as the abilities which enable a person to win a particular position for himself in a fair competition with others are the joint result of his natural endowments and the education and training he has received, unless there is in a community an equal opportunity for everyone to receive education and training commensurate with his natural talent, equality of fair opportunity will have no meaning.

In modern conditions equal opportunity for everyone to receive education will necessitate a widespread system of formal educational institutions which are open to everyone strictly on the basis of natural ability. Further, arrangements will have to be made to ensure that a

person's economic disability does not in any way come in the way of his pursuing the kind and level of education for which his natural talent qualifies him. However, there are other social factors besides the economic means he commands which will help or hinder a person acquiring the education suited to his talent. For instance, a child born and brought up in an educated family will naturally acquire a strong motivation for education; certain moral qualities on which alone the learning process can be founded such as industry, perseverance, ability to attend to uninteresting matters will be inculcated in it by its elders; it will have social confidence which facilitates helpful contacts with teachers and co-learners which are a powerful aid to education. Children coming from uneducated homes will be denied these and similar advantages.

If equality of opportunity for education is to be meaningful special arrangements will have to be devised to enable them to overcome the disadvantages flowing from their social situation. For instance, in order to sustain and intensify their motivation it will be necessary to attach greater prizes to the levels of education they attain than those available in a fair competition to others with similar educational levels. We may thus temporarily soften the requirements of the principle of equality of opportunity for positions in favour of the socially and culturally handicapped in order to achieve a real equality of opportunity for education. In the course of time, it will bring about a real equality of opportunity for positions.

That positions should be really, and not just formally, equally open to all is a requirement of justice not merely in view of the external rewards, like wealth and privilege, attached to them. As Rawls has pointed out, discharging the functions which go with a socially important position with devotion and competence is a rewarding experience which brings with it a sense of self-fulfilment. Such an experience often serves as a secure foundation for a person's sentiment of self-respect. In a hierarchically organized society – e.g., a society based on the caste system – groups of men, by virtue of their birth, share a common social status which is regarded as superior or inferior to that of others. This is a patently unjust arrangement and such undeserved inequalities call for redress. One way in which this can be done is by deliberately devising arrangements which would enable persons with inferior social status to occupy prestigious social positions. It is not merely the status of the individual from a low caste which is enhanced when he comes to occupy with success a

prestigious position; the entire caste shares in this enhanced status. The social confidence which persons with a socially inherited inferior status gain through this plays an important role in mentally liberating them from the feeling of inferiority which is an inevitable consequence of centuries of enforced social inferiority.

IN CONSIDERING THE ROLE OF EDUCATION in the context of social justice, it will be necessary to distinguish between education and training. Training is practical and specific in its aim. A person acquires as a result of training an ability to perform a certain kind of function or produce a certain kind of result in certain kinds of recurring circumstances, by employing standardized techniques; thus one is trained to drive a motor car or to weave cloth. Of course, a trained person is not expected mechanically to execute a rigid sequence of actions in a given kind of situation. A properly trained person will be capable of reflecting on what he is doing, correcting his mistakes, adapting his techniques to suit varying circumstances, and improving it in the light of experience. Again, techniques can be more or less sophisticated and some of them may demand a thorough grasp of fundamental scientific theories and concepts on the part of the learner and the practitioner. Nevertheless, the ability which technique yields is practical in its character and valued for utilitarian reasons.

As against this, education aims at giving a person an ability and taste for pursuits which are worthwhile in themselves. This aim is achieved by introducing a student to a form of rational knowledge or a rational discipline such as a natural science, mathematics, literature, or history, and by initiating him into rational procedures such as inventing, developing and testing hypotheses, critically assessing arguments, and making deductions from hypotheses. Achieving a progressive mastery over a rational discipline and a gradual command over the rational procedures which sustain it does not merely give a person a sense of fulfilment of the rational side of his being, which is an essential part of his nature as a human being; it also exercises a liberating influence on his entire attitude to life and its problems. He is introduced to activities which are worthwhile for their own sake, with internal criteria of success and excellence. He therefore learns to care for the intrinsic quality of experiences and activities apart from whatever instrumental value they may possess in making the life of the individual and the community more easy and comfortable.

This concern for the quality of life, capacity to enjoy things and activities for their own sake and to care for all those who are activated by a similar attitude in their own spheres of activity constitute the mark of a truly educated man. Education inculcates the qualities of imagination, vision, and concern for standards in its recipients in addition to fostering the constructive and critical powers of his intellect. Rational procedures are not merely a tool which men have discovered to be useful in solving problems and which, if wise, they will use as extensively as they can but lay aside from time to time if unwise. Rational procedures inform all distinctively human activities and therefore not to adopt them in the sphere of any activity is to fall short of the standards which are intrinsic to that activity. If we accept a belief as true merely because it is handed down by tradition without subjecting it to rational criticism we are merely refusing to apply to it the criteria to which an implicit reference is made when any belief is claimed to be true or false. This is not a tenable situation after men become explicitly aware of the rational procedure which is constitutive of the cognitive activity. By initiating a person into the rational procedures underlying different forms of cognitive activity education helps a person to become alive to the fact that every kind of human activity – say sports, eating, statecraft – can have its own intrinsic quality determined by relevant criteria.

Training gives a person the power to do something; education enables him to be something. It develops and makes explicit for him his human essence. In any worthwhile system of modern education training and education will be inseparably intertwined. While training will give a person the capacity to live a useful life, useful for himself and the community, education will enable him to live a life which is worth living. It is necessary to emphasize that education, as distinguished from training, has a distinctive role to play in bettering the human condition. For under the overwhelmingly urgent and massive need to increase and distribute fairly the material resources which would enable men to live better lives, we may lose sight of an essential element in a good human life. To deny education to a man is to prevent him, at least to hinder him, from possessing and enjoying his human essence, from claiming his kinship with the human race and its common heritage.

TURNING AGAIN TO THE CONCEPT OF A JUST SOCIETY, as we have seen, the idea of equal citizenship carrying with it equal rights and

privileges (and, of course, duties) is one of its essential ingredients. A society which recognizes every member as an equal citizen is, of course, a democracy but if democracy is to be real and not merely formal, a necessary condition is that every citizen should be aware of his status as an equal citizen and the rights that go with it. He must have knowledge of the constitutional and other procedures which have been devised to safeguard and give a concrete content to it. This knowledge will include many things – basic literary skills, knowledge of the working of the legal system, a general knowledge of the laws which particularly affect him such as tenancy laws or tax laws, current affairs, the party system, and the like. In short, every citizen must either possess or have access to the knowledge which will enable him to participate effectively in the political system of the land. Otherwise he will merely get lost in a democratic order.

Now it may be said that this kind of knowledge is a part of the ordinary equipment of a citizen which he acquires merely through the process of living in a democratic community, and that therefore no special effort needs to be made to impart it to him. This, however, is not quite true and in the Indian situation it is not true at all. A person who is illiterate, has no systematic access to relevant knowledge, and has no first-hand experience of participating in democratic processes is effectively debarred from realizing his equal citizenship; and this is the condition of a vast number of Indians. They cannot be said to be participants in even a potentially just social order; they can only be objects of exploitation or compassion for the rest of the citizens. Therefore any serious effort to make a transition to a just social order from the present order will demand a massive programme of popular education extending to every citizen, aiming at imparting (i) the minimum basic knowledge a citizen needs for exercising his rights as a citizen, and (ii) the skills which will enable him to acquire relevant knowledge.

Again, in view of the deeply entrenched attitudes which go with the caste system, a deliberate effort to inculcate the moral values which are basic to the concept of a just society such as equality and the dignity of a human being will also have to be a part of this programme. Political parties and even pressure groups which are committed to democracy do have a role to play here, but it can only be limited. The task is too basic and too enormous in its proportions to be left entirely to any agencies which by their nature are absorbed in pursuing sectarian, local, short-term tactical ends. It can only be accomplished through a steady, systematic single-minded effort

spread over a number of years. Only agencies which are committed to social justice and can appreciate the importance of such an educational programme for preparing the ground for a just social order will be capable of this kind of effort. This programme can partly be pursued through the medium of the formal system of education, but if the dropouts and all relevant age-groups are to be covered a massive programme of non-formal education will have to be undertaken. In fact, in our situation non-formal education will have to be the main component of this effort.

EVEN IF WE ACCEPT THE PRINCIPLE that inequalities are to be deemed fair if they work out to everybody's advantage, particularly to the advantage of the least favoured group in the community, inequalities must fall within a certain range if they are to be tolerable. A starving man is in too desperate a situation to make fine, long-term calculations about his overall prospects under alternative social arrangements. If forty per cent of our people are living below the so-called poverty line it is clear that we have a long way to go before we can think of reorganizing our society on the basis of justice. For the minimum description of a just society is that it is a society of self-interested persons based on certain fundamental principles which they would all regard as fair and a starving man can have no conception of self-interest beyond survival to be secured by any means. It is a sub-human existence. This situation cries to be redressed as speedily as possible. Sheer humanity, not to talk of justice, requires that a massive programme aiming at the economic rehabilitation of this section of the people be speedily implemented so as to bring them to the position in which it will be possible for them to form a conception of their self-interest as their individual good in cooperation with others on fair terms. In any programme of making a transition to a just social order this objective will have to be accorded priority over any other, subject to the principle of an equal consideration for the interests of future generations and the need to preserve the intellectual and cultural tradition participation in which is an essential part of any rational conception of human good.

Now it appears to me that such an economic programme will necessarily have an educational content. It will entail imparting elementary scientific information to those persons and teaching them simple productive techniques based on it so as to increase their productivity. As this programme is not to be thought of as a charitable

programme but as a necessary part of the transition to a just social order, it must be conceived and executed in a manner consistent with respect for them and with their self-respect as persons.

TO SUM UP: ANY SERIOUS ATTEMPT to reorganize our society on the principle of justice will necessitate a massive programme of popular education. The essential content of this programme will include knowledge of civic affairs which would enable a person to realize his status as an equal citizen of a democratic polity and productive skills based on relevant scientific information. For children of school-going age this programme can be implemented through the formal system of education but by far the larger part of it will have to be pursued through governmental and voluntary agencies as a non-formal educational programme. However, even the non-formal part of it will have to be implemented in the field by persons who are whole-time teachers, though perhaps they will be teachers of a kind different from conventional teachers. As the non-formal programme of popular education will be almost entirely in the interest of the least favoured sections of society, its entire cost will have to be met from public funds. This will also apply to the primary stage of the formal stream of which the less favoured sections of society are the main beneficiaries.

The principle of real equality of opportunity for education will have to be restricted in our present situation to the formal stream, though some ways must be found for identifying and getting admitted to the formal stream adult learners and young dropouts who show exceptional promise. Given the existence of a formal system of education, if a significant number of children do not enter it or do not stay the course till they reach the age when they can make decisions regarding their plan of life, that itself is a clear proof of the absence of real equality of educational opportunity in society. Therefore the aim must be eventually to create conditions in which the formal system will be able to embrace all children of the school-going age. The educational content of the primary stage will have to be the same as that of the non-formal programme of popular education with this difference. Apart from suitably modifying this content for adapting it to the capacities of the children, formal primary education will lay emphasis on developing their powers to pursue further knowledge on their own.

There need be no objection to private schools being run through voluntary effort which aims at providing a better kind of education

than that available in schools run with public funds provided that the cost is entirely borne by those who send their children to them and a reasonable case can be made for holding that everyone benefits from such a voluntary effort. For instance, if it can be shown that the result of the educational experiments conducted in such schools lead to an improvement in the teaching methods followed in all schools, or that persons taught in these schools because of the superior development of their mental powers make a significantly greater contribution to social welfare in which everyone has a share, these facts will count in favour of such schools. On the other hand, as such schools provide better educational opportunities to the more affluent, there will be an initial presumption against their desirability.

The cost of the education beyond the primary stage will have to be borne by the students and their guardians themselves on an income-cum-merit basis. However, there seems to me to be a case here for subsidizing even this sector of the educational system from public funds on grounds of justice. (i) The massive programme of popular education will demand a large number of able and properly motivated teachers. Such teachers can be educated and trained in institutions of higher education such as higher secondary schools and colleges. The cost of training them is a part of the cost of implementing the programme of popular education and therefore a part of it may properly be borne by public funds. (ii) If the incomes policy followed in a community ensures that the gains resulting from the superior productivity of the better-educated persons are fairly shared by all there should be no objection to a part of the cost of their education being socially borne. (iii) Education as distinguished from training gives a sense of rational fulfilment to the individual and this is an intrinsic good. In a situation in which the basic needs of many persons remain unfulfilled, it will be fair to ask those who pursue this good to bear its entire cost. But rational fulfilment is a rational good and therefore every rational being has a greater or lesser capacity for it and a greater or lesser urge for it, the urge itself getting strengthened through the process of education. Therefore, it is necessary to preserve and develop the intellectual tradition of a society so that as circumstances become more and more easy, larger and larger numbers of persons can participate in it. To neglect it and allow it to languish will be unfair to the future generations. There is, therefore, a case for meeting a part of the cost of keeping rational disciplines alive from public funds.

D. A. Dabholkar

The Indian Educational System: The Crucial Decade

THE INDIAN EDUCATIONAL SYSTEM is at present at a crucial if not a critical stage. During the past three decades its potentialities as well as its limitations have become obvious. It has fulfilled several tasks and it is now clear that it cannot fulfil certain other major tasks unless the system is radically reorganized. The political set-up that has come into existence after the last elections has only opened up one further possibility for action at this point of time. One of the basic needs of the situation in any effort at a reorganization of education in India is to have a national consensus and a readiness to implement that consensus firmly without any particular group or party trying to exploit the situation for furthering its own ends. With the emergence of the Janata Party, where a number of political parties have joined together for action, this has now come within the scope of practical implementation. It is to be hoped that even the Congress Party would join in arriving at such a consensus. Fortunately, all the parties owe their emotional and declared allegiance to the ideals set forth before the nation by Mahatma Gandhi. This could well be the starting point for further explorations for a national consensus.

There has been a progressive expansion in the number of educational institutions and in the number of students who entered the educational system during the past three decades. Some imbalances have, however, already become clear. With all our efforts throughout these three decades since independence we have not been able to attain the goal of literacy for all. Even now nearly 60 per cent of our population remain illiterate, and in spite of declarations from time to time no one has yet put forward a time-bound programme through

which illiteracy can be completely eradicated in India within a period of less than a decade.

At the secondary level, the orientation of the educational system towards equipping the students to look upon the secondary stage as terminal was not made. Such orientation would have implied that the students got adequate training which would give them the necessary self-confidence to be on their own after the completion of their education at this stage. It was necessary to do this because in any case for most of them this was going to be a terminal point whether or not they liked it. It is only recently that we have started the stage of higher secondary education. That stage has already run into difficulties and there appears to be a strong current through which the +2 stage would get merged in the +3 stage. This would imply that the aim of the +2 stage to achieve vocationalization would get completely lost. It would not, however, be enough only to resist the merging of the +2 stage with the +3 stage. What is really necessary is that adequate facilities are provided for vocational training at the +2 stage while ensuring that the economic system provides gainful employment to these trained people. Some of them may get this opportunity in organized concerns but most of them will have to be independent workers. The economic system must provide adequate protection and incentives for this type of employment.

IN THE FIELD OF HIGHER EDUCATION, with the expansion in numbers there have come into existence pressures for a lowering of the standards. It is becoming more and more difficult to maintain standards even in what are otherwise considered to be quality institutions. This aspect of the problem has not been squarely faced and the proper solution has, therefore, not yet been found. Such a lackadaisical approach will ultimately harm the interests of the nation, as it is essential even for national survival that our training at the highest level compares well with the training at a similar level in any advanced country.

The other aspect of the problem which till now was not so very obvious is also now coming to the fore with the large growth in the number of students who get their degrees. It is becoming more and more difficult for all of them to get jobs which would fulfil their normal aspirations in the present social set-up. Students from rural and backward areas find it even more difficult to get jobs in cities and advanced areas, where conditions of unemployment have already

come into existence. At the same time, they become total misfits in the rural situation to which they find themselves condemned. This dissatisfaction is going to have explosive repercussions if it is allowed to proceed in this fashion. The problem of educated unemployment in the urban areas is also equally explosive.

It would be well to realize that problems like these cannot be solved by limited action or even by strong action only in the educational field. The educational system is and has to be a part and parcel of the total socio-economic system. Unless, therefore, proper decisions are made on these matters at the national level and unless there is a machinery (governmental as well as party cadres) to implement effectively these decisions, any attempts at reform and reorganization will be like shifting of positions by an ailing person who turns from side to side in the hope of getting relief from a pain which is more basic.

LET US NOW LOOK A LITTLE FURTHER into the national consensus which will have to emerge in this connection. The main ingredients of this consensus will have to be as under:

(1) Everyone in India has a right to free primary education and it is the duty of the nation to direct its energies in this direction so that the task is fulfilled within the next decade. In effect, it would mean accepting the principle that the nation's economic resources ought to be suitably diverted for this purpose. More, it would also mean that the students and the teachers will be expected to play an effective voluntary role in the form of national service in the implementation of this programme.

(2) A national minimum standard of living must be guaranteed to all and till this standard is attained by all, incomes above a certain level will have to be completely frozen. There will be a need for reorganizing incomes of different groups even at the intermediate levels. Thus, there is a need for forging a consensus on the national incomes and wages policy. This policy should take into account the concrete needs of the country for various types of work as well as the total resources which the nation has at its disposal for distribution and, accordingly, lay down appropriate criteria. This becomes very relevant in relation to the educational system because the natural pressures for training are not oriented towards national needs but towards branches where the economic returns that can be expected in the present social set-up are the highest. It is no use blaming the students or their parents for directing their efforts in this fashion. It is

for the system to see that such a situation does not arise.

This can be easily illustrated with an example. There is a general rush of students for science and commerce courses. When they start out, most of these students have a desire to join medical or engineering colleges, or business management courses and they get frustrated when they find that they cannot get admissions to these courses and have to remain satisfied with a routine degree. On the other hand, we hear at times of problems of overcrowding and unemployment in the professions of medicine and engineering. Many of the doctors and engineers who are trained in India also prefer to go to more advanced countries where they get much higher salaries, and most of them ultimately choose to settle down there.

Now such a situation needs some further analysis. No democratic country should arbitrarily prevent a citizen from migrating to another country if he so chooses. But it need not be considered a negation of a democratic right if the nation insists that whatever expenses it has incurred on the training of such persons should be adequately reimbursed to it. In fact repaying the entire expenses involved in training would not be an adequate compensation because what is really being denied to the nation is the services of a trained doctor or engineer at a time of critical need. There is, however, no need to elaborate this point further.

Another aspect of the issue involves a suggestion to which there might be even stronger resistance. This is in relation to the problem of unemployment among doctors and engineers. Does it not look absurd that a country which has such poor medical services for the masses should complain of overcrowding in the medical profession? Similarly, have all the engineering projects which the country needs been completed that there should arise a problem of a trained engineer remaining unemployed? The answer to both these questions is obviously "No". The problem, however, gets projected in its present form because we have been oriented towards looking at it as a problem of employment at certain levels of salaries. This is where the manpower planning and incomes policy aspects become significant. It is futile to expect that these problems will get solved unless such basic issues are thrashed out and a national consensus is reached in relation to them.

IT IS OBVIOUS that in a country which professes democratic socialism the opportunity for education must be equally available to all sections

of the population irrespective of the circumstances in which the child is born. It may not be immediately possible to eliminate the adverse or helpful effects of the background of family circumstances. This would, however, only mean that our effort in the direction of equality of opportunity must be positively more purposeful and must have a bias towards providing more than a merely mechanical equality to the underprivileged groups. This is a problem of providing equal opportunity at the entrance, equal opportunity through the system, equal opportunity in the level of attainment and achievement at the exit point from the educational system, and also equal opportunity in status and employment after education is completed. It does not require any argument to prove that such equality is far from present at any of these levels at present. The studies and reports of various Commissions are witness to the truth of this statement.

If this equality of opportunity is to be made real, it would imply a number of practical policy decisions. These will include action in relation to the provision of nutritious food, hostel accommodation, expenditure on necessary amenities, expenditure for supplementary remedial courses as well as other normal educational expenses. Students from the weaker sections must be helped to enter the system in their proportionate strength and if their recruitment is less, a deliberate effort must be made to step it up to the level of the required proportion. Similarly, at the educational system, results must show (without any dilution of standards) that students from these groups have been properly helped to make up their academic deficiencies and that their attainments are also in the expected proportion. If this is accepted as a policy goal, the details can be worked out and research could be undertaken wherever it is necessary for a more concrete understanding of the problem.

Various suggestions could be made keeping the overall picture in view. Most of them require a radical change in our present mode of thinking. Such a change can also be implemented only if it is accepted as part of a national consensus and if action is supported at all appropriate levels by the various groups concerned, including the different political parties.

The suggestions are as under:

(1) It would be desirable to change the present position where a degree is the only gateway to government and other jobs. This would mean that the acquisition of a degree would not be a precondition for employment. In most cases where degrees are at present insisted upon,

the initial recruitment will be made on the basis of a competitive examination giving, of course, proper representation to the weaker sections. These recruits will then be trained for the specific jobs which they will have to do and their confirmation would depend upon their satisfactory performance. Additional training opportunities and a longer period for confirmation may be given to candidates from the weaker sections, but if they fail to make the grade their service will be terminated. When these vacancies are, however, filled they should be filled only from among the weaker sections and this would be in addition to the normal annual reservation that is made for weaker sections. Such an arrangement will help recruit the right persons, will give them the required training in the shortest period, and will also help maintain standards of performance in the organization in which they are employed. Channels of further education can be kept open for these people through morning and evening classes, correspondence courses, and various other techniques of non-formal continuing education.

(2) All education through formal channels at the higher level should be production-oriented. It can be the production of material goods as well as of services, but the educational system must participate in this type of production and provide the students with the necessary training and orientation for such work. Up to standard X, this may only mean teaching students the dignity of labour and giving them some work experience. From the higher secondary level it should involve production of goods and services which carry at least some value in the open market. This will test the practical utility of the training as well as expose the system to the real world outside of the educational institutions. Where for any reason such services are not easily marketable, they could be utilized by the state for fulfilling its programmes for providing social services and social amenities. One easy way of doing this is, of course, to expect institutions at a higher level of education to help those at a lower level to improve their performance. This could go down right from the university level to the primary and pre-primary schools and the entire system could also attend to the problems of mass literacy and social education.

(3) If education is productively oriented and if the nation needs all that production, it should be possible to find suitable employment for every person who receives training. The problem of unemployment can then only arise if the nation's need in that particular direction is completely satisfied. As has been said earlier, however, this approach

is possible only if we are able to evolve a proper incomes policy and if we also accept it as society's duty to provide employment. It should also be the duty of the citizen to do the work assigned to him on the salary that the nation thinks adequate under the circumstances.

If education is production-oriented and if the educated are going to find suitable employment, it may be proposed that all higher education should be self-financed in the sense that any help that is to be given to the students should be in the form of a loan scholarship at low rates of interest. These loans should be repayable through easy instalments right from the time when the student starts earning. Suitable administrative arrangements for this can be made if the principle is accepted.

(4) A shift of emphasis in this fashion will promote science and other practical courses and may lead to the decline of the social sciences and even more of languages and such other disciplines. A nation cannot afford to allow any of the branches of learning to languish and die out in this fashion. It is possible, however, to think of alternative ways in which all these branches of learning can be allowed to flourish without at the same time unnecessarily overcrowding the general educational stream. Thus, to take a simple instance, it is essential that this country maintain the highest levels of scholarship in the study of a language like Sanskrit. Arrangements could be made for the study of Sanskrit through non-formal channels for students and members of the general public. At a few convenient places this study may even be done through formal channels. We could have a national talent search for students with aptitude for the study of Sanskrit and then devise a scheme whereby these talented scholars can get the highest level of training at a few selected centres with adequate employment opportunities in research and other fields after their training is over. The details of such an arrangement can be worked out and the cost can be accommodated in what is being spent even now for the study of that language in an unorganized and haphazard fashion.

EVERYONE IN INDIA claims allegiance to Gandhiji. At one place Gandhiji had spoken of a "talisman". His talisman for judging the right course of action when in doubt is to bring to one's mind the picture of the most destitute specimen of humanity that one might have seen. Gandhiji suggested that one should ask oneself whether the action that one had in mind would help that poor person; if it were to

help that poor person one should take that course of action to be correct. This is a talisman which India has yet effectively to apply. The application of this talisman in the field of education would mean:

(1) That whatever we do must not increase the privileges of those who are already in a privileged position.

(2) That our action must improve the lot of the underprivileged and the distance between the underprivileged and the privileged must be progressively reduced till it vanishes.

(3) That everyone working in the field of education or passing through the educational system must get an effective impress of a spirit of dedication to the cause of the uplift of the poorest, the lowliest, and the lost. Being prepared to step down from one's privileged position, offering a helping hand to those who are below one to come up is the hallmark of this attitude. This is what Gandhiji would call "trusteeship". The idea of "trusteeship" is applicable not only in relation to material wealth; it is valid in all fields, even where intellectual capital gets accumulated.

A. B. Shah

Education in India: Some Problems

EDUCATIONISTS ARE IN THE HABIT of saying that it is only through education that we may hope to change human attitudes and even society. I have been a teacher for nearly twenty years, but – or perhaps because of that – I cannot claim to share this faith. However, I believe that education is one of the important agencies of change and we may neglect it only at our peril. But if education is to play its role in bringing about the kind of change that we would like to see in India, we have to understand where and why it has failed in accomplishing this task. Hence the title of this paper.

I shall discuss here some of the problems which seem important to me in the sense that unless they are satisfactorily tackled, we cannot expect education to play a creative role in the development of Indian society. In order to identify these problems we have to have a frame of reference. For instance, why are certain things looked upon as problems? Obviously because they come in the way of realizing certain objectives. We have therefore first to ask and answer the question, “What are the aims of education?”

The question splits itself into two parts. First, what are the objectives of education anywhere, in any age, in any society? These objectives would be valid in India as well as in the United States or in the Soviet Union. Second, what are the specific objectives of education in a society like India? I shall not go into a detailed discussion of these objectives; I shall merely state them in brief.

The first objective of education has always been to socialize the individual by making him develop roots in the tradition and culture of the society whose member he is. Even in bringing about a change one has to be a part of the system which one seeks to change. Otherwise, there is a danger of one’s destroying it or of changing it in the wrong direction. Second, education has to equip the individual with the basic

information and intellectual tools that would help him find his way through the plethora of experience that life is. Every moment of our life innumerable stimuli impinge on us. Different kinds of experience come our way and unless we have some intellectual skills, some norms, and some basic knowledge we cannot order these experiences into a meaningful whole. Education has, therefore, to equip the individual in this respect also. Third, it is necessary to train the individual for earning a livelihood in conformity with the norms of economic conduct accepted by the community of which he is a member. If the community’s norms permit earning money by smuggling, then an efficient educational system ought to teach smuggling. But if the community’s norms insist on honest work, then the educational system must impart to the student such skills as would enable him to make an honest living. Some problems of education that educators face arise from the fact that while society professes one set of norms, in practice it adheres to another, and contrary, set of norms.

The three objectives mentioned above would be common to education anywhere, anytime in the world. But each nation has a distinctive system of education, and these distinctive features may be described under three broad heads.

Perhaps the most important of the distinctive features of an educational system is the conception of human personality underlying it – whether the individual human being is looked upon as a means for the greater glory of the nation, or whether he is looked upon as an integral, self-sufficient unit from the moral point of view. In the latter case all social institutions derive their sanction ultimately from the extent to which they promote the growth of the individual’s personality and the flowering of his creative potentialities. One would be an authoritarian and the other, a liberal system of education. Until a few years ago, we had a fairly liberal system of education. It was introduced by the British for reasons of their own but regardless of what their intentions were, that system did promote a limited liberalization of the Indian society. It introduced a new conception of knowledge and for the first time brought into the intellectual universe of this country the idea of the individual, which we did not have in our traditional thought.

Second, the educational system of any society is distinguished by the view it holds of knowledge – whether knowledge is looked upon as something which is revealed by God to a prophet or to some exceptional beings like the Rishis who “saw” the verses of the *Rig*

Veda; or whether knowledge is looked upon as a set of tentative hypotheses subject to scrutiny and revision in the light of further experience, and therefore essentially public, not private, in character; not knowledge which is accessible only to the spiritually privileged few, but which is accessible to and verifiable by anyone who is willing to go through the necessary intellectual discipline and carry out appropriate experiments.

Finally, the human and material resources at the disposal of a society determine to a considerable extent the kind of educational system it can adopt. For instance, even if we were to come to the conclusion that we should adopt in this country the type of teaching system which is in vogue in England or the United States, I am afraid we just cannot do it; we have neither the material nor the human resources necessary for it. Anyone who has worked in a college or university during the past 25 years, during which the idea of tutorials and seminars has been popularized, would bear witness to the fact that even the finest educational ideas borrowed from the West have in most cases been vulgarized in our institutions. This happened not because we did not mean to implement them honestly; we did. But we did not take into account the constraints imposed by our economic situation.

The other consideration is that of human resources. We have men in large numbers but we do not have enough manpower. Anyone, again, who runs an institution, whether it is a college, a university, or an administrative office, soon comes up against the fact that while it is comparatively easy to get the top men it is extremely difficult to get the right kind of person for the second-rung leadership. The educational system which in fact evolves in any society will therefore bear the marks of the material and human constraints under which it has to function. The professions of policy-makers and the exhortations of political leaders, no matter how noble and high-falutin, count for little except perhaps to deceive the people and in the end themselves too.

NOW THESE THREE CRITERIA – namely, (i) the conception of the human personality that society cherishes, (ii) the conception of knowledge that it holds, and (iii) the material and human limitations under which the educational system has to function – would also influence the selection of students. The traditional Indian system, for instance, had a very simple principle of selection. No Shudra and no woman could enter the field of “true” knowledge, which was for ever

closed to them. Similarly, the choice of subjects to be taught and the methods to be adopted for teaching them will depend on the conception of knowledge held by society. Thus, in cultures like those of ancient Greece, medieval Christianity or Islam and pre-British India, the curriculum covered grammar, rhetoric, law, theology, and religion. It was only with the rise of modern industry and the development of modern science that it received certain additional dimensions.

The conception of knowledge that society holds will also determine whether the methods of teaching would be of the traditional type where the guru imparts the knowledge of truth in instalments to the disciple who tries to assimilate it, or whether teaching would be looked upon as a kind of Socratic quest in which the teacher tries to provoke the student into thinking for himself and arriving at his own conclusions. Finally, the values and attitudes to be cultivated through the educational process will be reflected in the curriculum, methods of instruction and examination, and the working of schools, colleges, and universities. If we keep in mind these universal objectives of education and the distinguishing features that the situation of a society impresses on its educational system, and examine the Indian context we shall have a clearer perception of the problems we face.

I WOULD DESCRIBE THE INDIAN CONTEXT in terms of a few general categories. One, which is most obvious, is that the Indian society is no more a traditional society of the kind that we used to think of, say, about 30 or 40 years ago. It is not yet a modern society; it is something between a traditional society and the modern society of the advanced West. Second, both as regards culture and economic development we are midway between the advanced countries such as the US, the USSR, or Western Europe on the one hand, and most of the other new states of Asia and Africa on the other. As a matter of fact, so far as the economy is concerned we have today the finest infrastructure of a modern economy and the largest scientific manpower among underdeveloped countries. The problem now is really not that of talent; it is, rather, one of organization and of the right kind of motivation and ethical norms. But we are at a disadvantage in terms of resources, size of population, and gross inequalities in the economic, social, and educational fields. Therefore, *development with distributive justice* is an imperative of the Indian situation. And, finally, unlike most other countries, unlike even most

of the developing countries, we are a multi-lingual, multi-religious, and ethnically heterogeneous society. This heterogeneity is so great that even in a single-language region, if it is large enough, we find a remarkable variety from one part to another in terms of attitudes and even of dialect.

What would be the major features of the ideal national system of education in such a society? I would propose four criteria. They are not exhaustive, only illustrative. First, our commitment to freedom and democracy should be reflected in the structure and working of the educational system. I am not thinking just now of political freedom or democracy; I am thinking, rather, of that conception of freedom which Kant had in view in asserting that man was not only a means but an end also, so that society would offer to each individual the maximum possible opportunities for realizing the best in him. He may have the potentialities of an artist, a mathematician, an industrialist, a farmer, or anything else, and the educational system must promote these values and help him in his attempt at self-fulfilment. It cannot do this by exhortation, but only through the way in which it functions. This is something different from socialization and we may have to take into account the possibilities of a conflict between the ends of the individual and those of the community of which the individual is a member. The educational system should, while promoting the growth and development of the individual's personality, also train him into civilized methods of resolving such conflicts or, in extreme cases, of living with them in a state of creative tension.

We have a mixed tradition. There is no doubt that an overwhelming part of our tradition is authoritarian. But the 150 years' contact with the West, whatever else it might have done to India, certainly released a new force in this society. For the first time in Indian history men began to talk of the rights of women and Shudras, the right of the individual to his own way of life, and the secular conception of knowledge with schools and universities open to all regardless of caste or sex. These ideas are now no longer looked upon as importations from the West. They have taken root in the soil and they form a part of our tradition. But this part is comparatively weak, and the educational system will have to exercise a sort of critical selectivity in the way in which it operates on this heritage of a mixed tradition. Our social institutions, the organization of our schools and colleges and even of the National Laboratories, the nature of authority and the distribution of power – all these will have to be judged by this criterion

of freedom. If they do not conform to it they should be made to do so without shedding too many tears over the likely loss of their ancient, and therefore sacred, character.

Second, if education is to function as a liberating force, obviously it should be independent of other kinds of organized power. The most organized kind of power in modern societies is that of the state. It is therefore of crucial importance that education be free from government control. This does not mean that government should give money and then sit back. (I am against government's giving money indiscriminately to educational institutions, but we shall come to that later.) Government certainly has a role apart from that of Santa Claus. It has to function as an operational critic of education as of all other institutions in society. That is, once the norms are accepted by society by any reasonable process, government's major responsibility should be to see that these norms are observed. But it should not be government's business to take over the work which properly belongs to other agencies and which, besides, it cannot do well. We have had a number of examples of well-meaning governments taking over things which they were not meant to do, and in the process doing harm to the society which they claimed to serve.

Third, in India it is necessary to reconcile the need for quantitative expansion and the demands of excellence. I believe that both quantitative expansion and the pursuit of excellence have to be encouraged. I also believe that it is wrong to run down the expansion of education, even of university education, on the plea that it leads to a dilution of standards. In a society in which for at least 2,000 years the majority of its members have been denied access to knowledge on the ground that they did not belong to the proper caste, to limit the expansion of education in the name of standards can only mean a perpetuation of a most obnoxious feature of the caste system. For a person who comes from a rural or small-town home, even if he does not attain proficiency in the subject he studies in college – even if he studies, say, his mother tongue in an indifferent manner – the mere fact of his rubbing shoulders with students of all kinds for a period of three or four years in college acts as a tremendously liberating experience. I know it from my own experience and I have seen a number of students coming from culturally and economically deprived homes to whom some years in college have given a new view of life and a new set of values. I therefore believe that there should be quantitative expansion of even university education in this country,

But, at the same time, India is a part of the modern world, where knowledge doubles itself every five or seven years which means that unless we have a generation of men and women who will be on the frontiers of knowledge and can compare favourably with the best scholars anywhere, India can never hope to catch up with the rest of the world. What we really need therefore is a system which would provide for the nursing of excellence and also for the spread of educational opportunities to as wide an extent as is possible. I do not think that these two requirements are irreconcilable, though this is not the place to develop the point.

Fourth, apart from its intellectual significance knowledge is also power. This power, which in any society is shared by a comparatively small privileged minority, has to be used in the public interest. One of the most important items on the agenda of public interest in this country would be its social as well as economic development, for we are not only economically backward, we are also socially and culturally backward. Educational institutions have therefore to keep in close liaison with the agencies of social and economic development.

NOW IF WE APPLY THESE CRITERIA to the educational system that we have in India, what do we find? I am afraid the findings are not very cheerful. We find that with a few exceptions such as the Tata Institute of Social Sciences at Bombay or the Centre for the Study of Developing Societies at Delhi, our educational institutions are run on authoritarian lines. Even the prestigious Indian Institute of Advanced Study at Simla has not been free from this curse. The administration in most of these institutions, which should really be looked upon as a service wing, generally lords it over the academics. What is worse, the academics accept it. Not only that; the academics strengthen it by fawning on the administrators whether they are vice-chancellors or registrars, ministers or secretaries. Instead of standing up for their professional dignity, they flatter them and therefore belie their professional commitment. The debasement of university life witnessed during the Emergency was merely an extreme expression of a malaise that has afflicted Indian universities for a number of years.

Second, because of this authoritarian trait, we find an almost total lack of innovation in our educational system. Take, for instance, the syllabus in economics, sociology, physics, or mathematics. One finds a dead uniformity almost all over the country. Again, with a few exceptions which only go to prove the rule, if one university (especially

if it is a leading university) evolves a new kind of syllabus most of the universities in that region would imitate it blindly. The points of reference formerly used to be Oxford, Cambridge, and London. Now there are additional points of reference – Harvard, Chicago, Yale, Stanford and, coming nearer home, Bombay, Delhi, Calcutta, and so on. But nowhere does one find that the faculty themselves decide what they will teach to whom, and in what manner it shall be taught. The reason is simple; the whole structure has been reared on the model of the Civil Service, which created the Indian university system 120 years ago. Conceived in sin and brought up in bondage, the university in India could not promote creativity and innovation.

One consequence of this has been the neglect of quality. Our conception of knowledge is either of the Shastri type, so that the capacity to recite the Vedas with the right intonation is much more important than an understanding of their meaning. This is the authoritarian conception of knowledge. Or it is the Babu conception – does it help one in drafting one's letters correctly? This is perhaps a trite illustration, but it would explain why most of the products of Indian universities, even those who graduate with honours in subjects such as medicine, engineering, or business management, show very little originality of thought or a spirit of enterprise.

Another feature of our system is that whereas we stuff information into the heads of our students, we do not try to give them any sense of intellectual discipline. All knowledge beyond the stage of data-gathering is essentially a deductive system. And therefore unless we give the student a rigorous intellectual discipline, so that he can decide whether the conclusion follows from the premises, or whether he has drawn all possible conclusions from them, we do not truly educate him. Even in the teaching of science we do not give our students any conception of the intellectual discipline that science is. We give them facts, but we do not develop in them a concern for ideas. Incidentally, that is one of the reasons why most of our research is trivial. I remember a thesis in economics which ran into 1,400 pages but which did not contain a single new idea. Most of it was a number of tables about the working conditions of sugar-farm workers. I do not wish to deny the importance of this information. But it could have been collected by half a dozen field assistants; it did not require a Ph.D candidate working in one of the most eminent institutions of economic research in this country. Such work could earn a doctorate only because our tradition is basically anti-

intellectual and instead of subverting it, our universities have willingly conformed to it.

Next, our system is oriented in favour of the middle and upper classes. We talk about socialism, we talk about the poor and the oppressed, but all this is a fashion. Thus in spite of all the expansion which has taken place in the past 30 years, not more than 10 per cent of the relevant age-group go to college. With a few exceptions these 10 per cent obviously come from the middle and upper classes. The children of the nearly 45 per cent who live below the poverty line do not go to college. And yet what do we do? As Dr Amrik Singh has pointed out¹, we spend nearly one-third of the total educational budget on higher education, and to that extent we deny sorely needed funds for the expansion and improvement of primary and secondary education. Second, we subsidize higher education in a most selfish manner. The revenues of the Government of India and of the State governments ultimately come from direct and indirect taxes, and the meagre profits from government-run undertakings. A significant proportion of the taxation revenue comes from indirect taxes, which impinge in the same way per unit of consumption on business executives and the dwellers in the slums of Bombay and Calcutta. It is partly from this money that we subsidize higher education. The extent of this subsidy, as calculated from the data published by the Government of Maharashtra, is indicated by the following figures.² In the year 1972-1973, this government spent from its own funds Rs 106 per student per year on primary education, Rs 235 on secondary education and Rs 773 on higher education. It spent Rs 4,500 per student on the post-graduate departments of the universities in the State, Rs 360 on arts colleges, Rs 836 on science colleges, Rs 2,000 on engineering, and nearly Rs 2,800 on medical colleges. At the all-India level, an indication of the magnitude of public subsidy to students on elite institutions such as the Indian Institutes of Technology was indicated to the present writer by Professor V. V. John, then a member of the Governing Board of the IIT at Delhi, in a personal conversation some years ago. He said that the IIT budget worked out to nearly Rs 16,000 per student per year as against a tuition fee of about Rs 500 per year. In other words, the education of an IIT student is subsidized from public funds to the tune of more

¹ "The Indian University in the 80's and 90's", mimeo., 1976.

² *Statistical Abstract 1972-73*, Government of Maharashtra, Bombay, 1976.

than Rs 75,000 over a period of five years.

The public subsidy to higher education mostly benefits the children of the elite. However, these children when they graduate and enter life do not return a single paisa of this "loan" to society at large. The proper thing therefore would be to charge appropriate fees so that each institution could be self-sufficient for current expenses without taking anything from the government. In order that talented children from economically backward homes may not be denied education, they may be given full scholarship loans to be returned only when they begin to earn. This is the only way of ensuring social justice in the field of education. But it is not likely to be adopted because policy decisions are made by members of the elite, and no elite in the world has ever given up its privileges voluntarily; they had to be taken away. Also, since this education is primarily for the elite, it has to a large extent become irrelevant to the problems of our social, cultural, and economic development.

Let me give a few examples. Take, for instance, the work done in the political science departments of our universities. Ever since the Americans thought it was necessary for them to study the political behaviour of the Indian people, they began to make funds available to Indian universities to carry out election studies. One need not condemn such studies without qualification; they are useful and can occasionally be interesting. But does one have to repeat them every five years and carry them out with such disregard for time that the report of the 1967 election becomes available only in 1972? Besides, political behaviour has much more to it than mere election behaviour. Very few political scientists have studied the non-political dimensions of political behaviour in India. For instance, not one out of the 110-odd universities in India has so far studied the interaction between religion and society in this country though religion here is still one of the most powerful forces in personal and public life. It is significant, for instance, that in the year of grace 1976 cow-slaughter could be banned in India just because an old man might otherwise die. It was not realized, in spite of ample economic evidence, that if cow-slaughter were really stopped, the agricultural economy of this country would in a few years be disrupted beyond repair. Why, in spite of this evidence, the government found it necessary to ban cow-slaughter is a problem for the social scientist. How does religion operate in Indian society? How does it determine the attitudes of the people from the elite to the ordinary villager? Indian universities have, by and large, neglected the

study of problems of this kind. But if we want to modernize Indian society we shall have to understand religion, not as blind opponents but as social scientists.

Or take the courses in logic and philosophy. Modern logic is one of the most important developments in the field of abstract thought, and we had something similar to it which was independently developed much before the British came. And yet while Laxmanshastri Joshi's *Prajna Pathashala* (at Wai in Maharashtra) would study *Navya Nyaya* but be starved of funds, the University of Bombay or Poona would not consider the subject worthy of its attention.

Not only this, the situation is equally deplorable as regards the teaching of Indian philosophy in our universities. We study the subject as presented by Dasgupta, Radhakrishnan, or someone else instead of requiring the student to go through the texts in the original Sanskrit or even in good English translation. In my view, this indicates a lack of concern for ideas. Knowledge is not valued by us as an instrument of social or economic progress, nor even as something worthy of pursuit in its own right as it was for about a thousand years centring on the beginning of the Christian era.

And finally a word about the rigidly formal structure of our educational system. If the University Grants Commission feels, probably with good justification from its own point of view, that undergraduate courses should be diversified all that it has to do is to send out a circular to the universities. They in turn send out its copies to the Boards of Studies, and each Board of Study dutifully adopts the pattern suggested by the UGC and everyone is satisfied that he has done his job. This may be all right in an army, where the individual soldier does not have to think about policy and its implications. But it cannot work in education. Unless the teacher feels involved and considers it *his* task to bring about reform, we cannot expect a true revitalization of our academic life. And this cannot be done until the rigidity of the educational structure is thoroughly shaken.

THERE IS ONE MAJOR PROBLEM of which we are only now beginning to be aware, though it was easy to foresee it. This is the problem of numbers. While we need a much greater quantitative expansion of education than has taken place so far, it does not imply that the number of schools and colleges should increase proportionally – indeed, even the USA is now finding it difficult to provide adequate funds for higher education. Let me give a few

figures. About two years ago, the Centre for the Study of Social Change in Bombay prepared a paper on "Education in Maharashtra in A.D. 2000". According to the data included in this paper, by A.D. 2000 the population of Maharashtra will have increased at the present rate of growth, to about 100 million from the 50 million in 1971. The number of primary teachers will have to be 300,000 as against 191,000 in 1971. This will require additional classrooms because the number of school-going children will have increased from 1.46 million to 6 million. At the primary stage alone the cost of additional classrooms will, at 1975 prices, be Rs 70 crore. At the secondary level, we shall need 110,000 additional classrooms and 120,000 additional teachers. At the time the paper was prepared the cost of constructing one classroom according to government norms was Rs 4,000. By A.D. 2000, even if we succeed in maintaining a reasonable control over inflation, the cost would be at least twice this figure. If we work out the figures and compare them with other demands on our resources, we shall find that this will just not be possible. Indeed, we have been facing this situation even now. In 1976-77 more than half the colleges in Maharashtra were not able to pay their teachers, some for two months, some for six, and some for a whole year. They had to take bank overdrafts at the usual commercial rate of interest of 15 to 18 per cent per annum.

Why do such things happen, and what can we do about them? What can we do, for instance, about the problem of funds? This is where, again, a reconsideration of the formal structure becomes relevant. We shall not be able to provide education to those who are outside its scope today unless we bypass the formal structure and introduce alternative channels through which a person can receive education whether he is a child or an adult, a business executive or a housewife. We shall have to adopt what Mr J.P. Naik has called a multipoint entry system and drop all the requirements which merely serve a formal purpose. Similarly, why should a person who wishes to study biology be prevented from studying mathematics at the same time? Why can't we offer a set of courses as universities abroad do and leave it to the student to select the ones he wishes to study? After all, the one crucial element in the educational process is the coming together of the student and the teacher; all else is of secondary importance. Besides, most people do not bother about degrees after they have reached a certain age. They want to have, rather, an educational experience. They wish to go through a certain

intellectual discipline so that they would have a richer personality and a more meaningful existence. But our educational structure does not permit this. However, such flexibility is now going to be absolutely necessary because we are not going to have money for constructing enough new buildings for schools, colleges, and universities, for buying costly furniture and equipment which are used for only a few hours a day, and for paying comparatively high salaries to an ever-growing faculty. We shall have to put our human and material resources to optimum use and allow people who wish to study and those who are in a position to teach to do so in any manner that they find mutually convenient.

Another feature of the present system that we shall have to take into account is the rapid obsolescence of knowledge to which a reference has been made earlier. Knowledge becomes obsolescent every few years and therefore it would be futile even to attempt to impart all the relevant information to the student at the school or university stage. What we should hope to achieve is to introduce him to the fundamental principles and methods of enquiry and to teach him how to find for himself the necessary details by looking up the relevant books and journals. That way we can also initiate him in library research right from the beginning instead of stuffing all kinds of fact into his head. Otherwise, our educational system will not be able to produce the kind of men and women who can contribute to the progress of their country. What Paulo Freire calls the "banking" concept of education³ has to give way to "problem-posing" education not only for promoting a social transformation but even for ensuring that the educational process will not break down under the weight of rapidly growing knowledge.

IN THE LIGHT OF THE PRECEDING DISCUSSION it is obvious that the liberal role of education is once again going to become relevant. There is also another reason, not explicitly considered by Paulo Freire and others, why this will be so. The more we industrialize, the more necessary it is going to be to teach the individual how to employ his leisure and spare resources in a creative manner. We read about the disruption and dessication of life in the metropolitan cities of the West. People who live in Indian cities also experience a similar feeling of alienation though, thanks to the survival of caste and kinship loyalties, not in the same measure. But here too, with the steady

3 Paulo Freire, *Pedagogy of the Oppressed*, Penguin Books, 1973, p. 46.

weakening of these loyalties, it is going to become an acute problem in the years to come.

In another respect, also, liberal education would gain in importance. With the significance of the individual being increasingly undermined as a consequence of industrialization and blind urbanization, he will have to develop his inner resources if he is not to become a robot or a cog in the machine. If he is able to do this, not only he but even those who rule over him retain some awareness of the basic purpose must of the social enterprise, which is to enrich human life and to enable people to realize the best in them. Unless this is done, education may actually prove, as Paulo Freire points out and the experience of totalitarian societies demonstrates, an instrument of enslaving the people. It has not yet happened here, but it may in the years to come unless we are conscious of the dehumanizing potentialities of modern technology and large-scale organization.

There is another issue which needs to be considered in this connection. The spread of education is necessary on grounds of social justice and the cultural enfranchisement of the vast majority of the Indian people. At the same time, the economy of this country cannot be developed as rapidly as would be necessary to absorb the products of its educational system. We have been talking of growing unemployment among the educated, but right from the time of Lord Curzon there has been criticism of the educational system in India on the ground that it produced unemployed and unemployable clerks. This criticism is going to be more important in this age of mass communication. No matter how much we talk of national discipline, if people remain unemployed over a long period of time after completing university education they are not going to keep quiet. If they are not permitted open dissent, as they were not during the Emergency, they will either resort to sabotage or become apathetic. In either case, they will be a drag on society.

But it would be wrong to blame education for the unemployment of its products unless they are unsuitable for employment. However, even if we produce first-rate engineers and if there are not enough job opportunities for them, they are going to remain unemployed as they were a few years ago. If this is not to happen and if educated unemployment is not to explode in violence, we should realize that education cannot *create* employment except for teachers; it can at best equip its products to understand why there is unemployment and how to remove it. Which means that even technical and professional

education has to be informed with the liberal spirit. Otherwise, we shall produce race horses who would run with blinkers on their eyes and would not know how to jump over or bypass the obstacles in their path.

This cannot be done, as the Education Commission has recommended⁴ and as Vinoba Bhave is never tired of repeating, by trying to bring about a synthesis of "science and spirituality". It is difficult to understand what this delightful phrase means. Anyone who has studied science as a cultural discipline and has also tried to have the kind of experience which would be considered spiritual by those who have the authority to speak on it, would agree that the two just cannot mix. Science and ethics, yes; science and culture, yes; science and creativity, yes; but science and spirituality – they just cannot be combined. As a matter of fact, tradition is still so powerful in this country that it has so far successfully prevented the emergence of a viable scientific culture. Let us not therefore be misled by pleasant platitudes; we shall have to make some harsh decisions. We may have a soft corner for what is ours even if we do not like it; there is a feeling that it is *our* tradition in spite of its having certain elements which are undesirable. But as a serpent sloughs off its skin we shall have to reject such elements though they may be a part of our being. Unless we adopt this attitude to tradition and apply to it what I have referred to as the principle of critical selectivity, we shall not be able to prevent the growth of frustration and anomie, which may one day blow off the educational system itself.

THIS IS A PRETTY LONG LIST OF PROBLEMS and no government, much less a private group, can hope to solve them overnight. One feels sad not because these problems are not solved, but because not many people who make decisions on education are even aware of their nature and significance. Our first job should therefore be to formulate these problems more precisely and with better evidence than is possible within the limits of a paper, and try to educate the educators and policy-makers in the sphere of education. Mr J.P. Naik has dedicated himself to this task with a kind of devotion and competence which are unique in the history of education in India. It is a measure of the distance we have yet to go that even Mr Naik can only claim rather limited success.

⁴ *Education and National Development: Report of the Education Commission*, National Council of Educational Research and Training, New Delhi (1971 edn), p. 13.

H. N. Pandit

Educational Development in India: Trends and Search for Alternative Strategy

Macro Growth Indicators

DURING THE PAST THIRTY YEARS the Indian educational system has grown four-fold. The overall progress of the educational system in relation to the national economy may be seen from Table 1. There has been considerable increase in the national expenditure on education. This has been mainly due to the unprecedented demand for education based on the needs of manpower for a growing and diversifying economy, aspirations for social progress and growth in the population of the country. During this period the national expenditure on education has grown seventeen-fold, the per capita allocation on education at current prices ten-fold, national income six-fold, and total enrolment four-fold, whereas population increased by one and half times.

Growth in Schooling Facilities

FROM TABLE 2, IT IS OBSERVED that the number of institutions for general education at the school stage has grown nearly three times between 1950-51 and 1975-76. The total enrolment of students and number of teachers have grown four-fold during the same period.

Implementation of Constitutional Directive

THE PROGRESS MADE in the field of school education has to be studied in relation to the constitutional directive contained in Art. 45. This has been done in Table 3. It is observed from the table that enrolment

in the age-group 6-11 has increased from 42.6 to 82.7 per cent and in the age-group 11-14 from 12.7 to 36 per cent during the period of 24 years. Even at the end of the Fifth Five Year Plan, it is not possible to achieve complete enrolment of the children in the age-group 6-14. Furthermore, the enrolment of girls even in the final year of the Fifth Plan will be 79 per cent in the age-group 6-11 and 32 per cent in the age-group 11-14.

Table 4 presents enrolments in the age-groups 6-11 and 11-14 in rural and urban areas of different States in 1973. The data analysed here are taken from the nation-wide Third Educational Survey conducted by the NCERT in 1973. The States have been classified into three major groups according to high, moderate, and low enrolment rates. It is observed from the table that in eight States, enrolment at the primary stage ranges from 73.1 per cent to 80.7 per cent in rural areas and from 61.9 per cent to 104.2 per cent in urban areas. At the middle stage, enrolment ranges from 17.3 per cent to 36.1 per cent in rural areas and from 60.7 per cent to 93.8 per cent in urban areas. There are four States having low enrolment rates: Andhra Pradesh, Jammu & Kashmir, Bihar, and Rajasthan have enrolment rates below 66 per cent in the age-group 6-11 and 30 per cent in the age-group 11-14 in rural areas.

In order to judge educational progress in terms of strict interpretation of the constitutional directive, it is necessary to take into account the over- and under-age population enrolled in the age-group 6-14. From Table 5 it is observed that the share of the over- and under-age population has declined from 24 per cent in 1951 to 21 per cent in 1973. It may further be noted that the share of under-age children below 6 has consistently increased from 8.9 per cent to 11.1 per cent during the period while the share of over-age children above 11 has declined from 15 per cent to 9.9 per cent during the same period. The enrolment of under- and over-age children at the elementary stage of education in 1975-76 has been worked out to be of the order of nine million in a total enrolment of 83 million. It is, therefore, clear that only 57.9 per cent of children in the age-group 6-14 were enrolled in classes I to VIII instead of 64.9 per cent as would appear from crude enrolment figures.

Despite several efforts made during the successive Five Year Plans, the education of girls in general has remained a serious problem. Table 6 shows participation rates of girls between 1950-51 and 1975-76. It is seen that even in 1975-76, the share of girls in the total enrolment at

the primary stage was only 38.9 per cent, at the middle stage it was 31.6 per cent, and at the secondary stage, 28.2 per cent. Even the Fifth Five Year Plan does not visualize a radical change in the participation of girls at various stages of school education.

As a result of the slow progress in the implementation of Art. 45 of the Constitution, the growth in the overall literacy rates for men and women has not been satisfactory. The literacy rate for women increased from 7.9 per cent to 18.7 per cent as against 24.9 per cent to 39.5 per cent in the case of men during 1951-71. Despite the overall increase in the literacy rates of both men and women, the number of illiterates has increased from 213 to 387 million during the same period. It may also be noted that India's share in the world's illiterates increased from 45 per cent to 52 per cent during this period.

It may also be mentioned here that children in the age-group 10-14 usually withdraw to assist the family in the augmentation of their income. At present, there is no provision for part-time schooling or multiple entry in our educational system to meet the educational needs of children who are not able to continue full-time education due to a number of reasons. According to the Census of 1971, 7.5 per cent of the children belonging to the age-group 5-14 were found involved in different types of economic activities.

The present government is determined to implement Art. 45 of the Constitution within a period of 12 years or less, i.e. by 1988-89. An attempt, therefore, has been made to work out, on the basis of certain assumptions, the financial implications of this resolve. These are briefly explained below.

Additional Enrolment

THE TOTAL ENROLMENT in classes I to VIII in 1976-77 was of the order of 86 million. Out of this, 12 million were either below the age of 6 or above the age of 14. Thus the net enrolment in the age-group 6-14 was of the order of 74 million. The school-going population in the age-group 6-14 in 1988-89 has been estimated at 135 million on the basis of population projections prepared by the Expert Committee appointed by the Registrar-General of India. Therefore, additional enrolment in the age-group 6-14 will be of the order of 61 million during the next 12 years.

Estimated Expenditure

(a) *Teacher Cost.* On the basis of State-wise teachers' salaries

published by the Ministry of Education, the average salary per teacher per annum has been estimated at Rs 4,320. On the basis of a teacher-pupil ratio of 1:40, the cost per pupil has been estimated to be Rs 108*.

(b) *Provision of Free Text-books.* If we assume that free text-books and stationery are provided to 25 per cent of the student population at the rate of Rs 6 per child, the overall cost per pupil works out to Rs 1.50.

(c) *Non-Teaching Cost.* Ten per cent of the teacher cost estimated in (a) works out to Rs 10.80.

(d) *Direction and Supervision Cost.* It is estimated that this cost comes to 2 per cent of $(a + b + c)$; it works out to Rs 2.40 per pupil.

(e) *Non-recurring Cost.* It is estimated that building space per child will cost Rs 15 per annum.

From (a) to (d), it is clear that the recurring expenditure per pupil works out to be of the order of Rs 122.70, say Rs 123. If we assume the teacher-pupil ratio to be 1: 45, the recurring expenditure per pupil works out to be Rs 109. In order to enrol 61 million additional children during the next 12 years, the recurring and non-recurring financial implications on the basis of these cost norms are given in Table 7.

From this table it is seen that the cost of enrolment of additional 61 million children during the next 12 years will range from Rs 4,442 to Rs 4,900 crore at 1976 prices.

State-wise Disparities

TABLE 8 PRESENTS State-wise educational disparities in relation to per capita income and educational development index. While compiling the educational development index, different States were ranked according to the following factors:

Quantitative Achievement. This has been measured in terms of literacy rates and enrolment ratios, percentage share of girls, and enrolment at various stages of education.

Qualitative Achievement. This has been measured in terms of pupil-teacher ratios.

Support to Education. This has been measured in terms of the share of the budget allocated to education.

*Teachers' salaries account for the bulk of the total direct expenditure on education. At the elementary stage, they constitute over 90 per cent of the total direct expenditure on education.

By pooling together individual ranks, joint ranks for different States have been arrived at with respect to their index. States were further arranged according to their per capita incomes. On the basis of average per capita income and educational development index, it is observed that economically less prosperous States were also educationally backward as may be seen from States in category C with per capita income between Rs 400 and Rs 500. However, educationally backward States were not necessarily economically less advanced as may be seen from States in category A, with per capita income between Rs 600 and Rs 1,000. On the whole, it may be concluded that economically poor States need further support from the Central government in order to equalize educational opportunities among different States in the country.

Weaker Sections

AGAIN, EDUCATION OF SCHEDULED CASTES and Scheduled Tribes has been one of the major concerns of our educational policy after independence. Scheduled Castes are mostly concentrated in the States of Uttar Pradesh, West Bengal, Bihar, and Tamil Nadu and the Scheduled Tribes population is found mainly in the States of Madhya Pradesh and Orissa. Even though there has been considerable expansion in the provision of educational facilities, the progress achieved has been lower than for the population as a whole. Table 9 gives the co-efficient of equality for these weaker sections of society in different types of institution. This has been calculated by dividing the proportion of Scheduled Castes/Scheduled Tribes in relation to the enrolment of the remaining communities by their corresponding proportion in the population. This ratio has been expressed in percentage terms. If the value of the co-efficient is equal to 100, it implies that the share of children from Scheduled Castes/Scheduled Tribes in educational enrolment is equal to their share in the population as a whole. The inter-temporal comparison of these co-efficient reveals that even in 1971 the Scheduled Tribes lagged behind the others in school education as seen from columns 4 and 5 of the table. The position of the Scheduled Castes in 1970-71 was much better as compared to the Scheduled Tribes, but their participation at middle and higher secondary levels was much lower than that of the population as is evident from column 3 of the table.

Proposed Strategy

IN ORDER TO MAKE EDUCATION MORE RELEVANT to the economic

framework of agriculture, industry, etc., the Gandhian scheme of basic education or *Nai Talim* must be made an integral part of national planning during the Sixth Five Year Plan. However, basic education should not aim at education plus work but education through work. In other words, education at different levels should be imparted through productive and socially useful activities effectively linked with the short- and long-term growth of the village and the national economy. This has been clarified by Gandhiji himself in one of his speeches in December 1947 in the following words:

Nai Talim is life-giving, whereas education given by the foreign government was necessarily life-destroying. Basic education covers the whole life. Experience has shown that it has great possibilities and begins with the embryo and ends with life itself. Except for capital expenditure, it costs nothing. The teachers earn what they take. It stands for the art of life; therefore, both the teachers and the pupils have to produce in the very act of teaching and learning.

The new pattern of education will become meaningful only if the fundamental principles of basic education are introduced at all levels in a systematic manner. Our economy is essentially a labour-oriented economy and the educational system has to be focused on harnessing the human resources in the most efficient manner. This would call for radical changes in the approach and methods of teaching. Ultimately, education has to instil a sense of self-help and self-confidence among the rising generations of our country through creative activities, community service, etc. The success of the new reforms in the educational field will depend on public support and a decentralized administrative set-up and on the involvement of teachers and parents in the formulation and implementation of the educational programmes at the institutional level.

TABLE 1
Macro-Educational and Related Growth Indicators: 1950-51 and 1975-76

Sl. No.	Item	1950-51	1975-76	Mean Annual Rate of Growth
1	2	3	4	5
1.	National Population (in millions)	361	605	2.09
2.	National Income (NNP) (in millions)	95,300	602,930	7.66
3.	National Educational Expenditure (in millions)	1,140	19,660	12.06
4.	Total Enrolment (in millions)	12.5	100	5.62
5.	Educational Expenditure			
	(a) Per Capita	Rs. 3.2	32.5	9.7
	(b) Per Pupil	Rs. 44.7	197.0	6.11

Source: Published and unpublished documents of the Ministry of Education and the Ministry of Finance, Government of India.

TABLE 2
Growth in Educational Facilities at the School Stage of Education: 1950-51 to 1975-76

Sl. No.	Item	(in 000's) 1950-51	1975-76	Mean Annual Growth Rate (%)
1	2	3	4	5
1.	Institutions	230.5	622.7	4.1
2.	Enrolment	235.2	913.7	5.6
3.	Teachers	749.9	2739.4	5.3

Source: Ministry of Education.

TABLE 3
Enrolment Ratios in Primary and Middle Stages of School Education:
1950-51, 1973-74 & 1978-79 (Target)

Year	Primary(6-11)		Total	Middle(11-14)		Total
	Boys	Girls		Boys	Girls	
I	2	3	4	5	6	7
1950-51	59.8	24.6	42.6	20.7	4.5	12.7
1974-75	98.2	66.1	82.7	48.0	23.1	36.0
1978-79 (Target)	111.0	79.0	96.0	59.0	32.0	46.0

Source: *Fifth Five Year Plan* (1974-79) and Ministry of Education.

TABLE 4
Rural-Urban Enrolment Rates in Primary and Middle Stages by States: 1973

Sl. No.	State	Primary		Middle	
		Rural	Urban	Rural	Urban
1	2	3	4	5	6
		<i>High</i>			
1.	Meghalaya	134.6	119.5	25.3	78.2
2.	Manipur	134.4	146.5	41.2	108.2
3.	Nagaland	127.9	107.4	41.2	72.7
4.	Assam	107.4	104.0	36.6	102.0
5.	Tamil Nadu	102.1	107.5	36.0	66.6
6.	Kerala	99.6	94.1	82.2	104.8
7.	Himachal Pradesh	90.8	121.6	46.6	106.2
8.	Punjab	90.0	86.7	37.1	80.4
9.	West Bengal	88.1	71.3	13.8	82.5
		<i>Moderate</i>			
1.	Gujarat	80.7	94.5	34.5	69.7
2.	Tripura	79.2	80.9	30.3	93.8
3.	Uttar Pradesh	78.5	74.0	25.0	61.4
4.	Karnataka	75.5	76.1	31.7	60.7
5.	Maharashtra	75.2	88.5	36.0	72.1
6.	Madhya Pradesh	74.2	104.2	17.3	62.9
7.	Orissa	73.5	87.1	18.4	60.8
8.	Haryana	73.1	61.9	34.3	64.4
		<i>Low</i>			
1.	Andhra Pradesh	66.0	89.5	15.5	58.3
2.	Jammu & Kashmir	54.1	83.5	30.5	76.1
3.	Bihar	52.2	65.5	13.4	31.9
4.	Rajasthan	51.8	82.4	18.9	57.5
	All India	76.1	86.0	26.5	67.1

Source: *Third All India Educational Survey*, NCERT, 1973.

TABLE 5
Percentage Share of Under-age and Over-age Children
in Primary Education: 1951, 1965 and 1973

Year	Percentage enrolment in Classes I to V	
	Under-age below 6	Over-age above 11
1951	8.9	15.2
1965	9.9	12.5
1973	11.1	9.9

Source: Ministry of Education for 1951 and 1965, and *Third Educational Survey* for 1973.

TABLE 6
Enrolment Participation of Girls: 1951, 1976 and 1979

Year	Percentage enrolment of girls to total enrolment		
	Classes I-V	Classes VI-VIII	Classes IX-XI
1950-51	23.1	17.0	13.5
1975-76	38.9	31.6	28.2
1978-79 (Target)	40.8	33.6	28.3

Source: *Fifth Five Year Plan* and Ministry of Education.

TABLE 7
Projected Costs of Additional Enrolment at Elementary Stage

Sl. No.	Year	Additional Enrolment (in millions)	Additional cost (crores of Rs)				
			Recurring		Non-recurring	Total	
			Lower limit	Upper limit		Lower limit	Upper limit
1	2	3	4	5	6	7	8
1.	1977-79	5	54.5	61.5	15.0	69.5	76.5
2.	1978-79	10	109.0	123.0	15.0	124.0	138.0
3.	Sub-total (1 to 2)		163.5	184.5	30.0	193.5	214.5
4.	1979-80	15	163.5	184.5	15.0	178.5	199.5
5.	1980-81	20	218.0	246.0	15.0	233.0	261.0
6.	1981-82	25	272.5	307.5	15.0	287.5	322.5
7.	1982-83	30	327.0	369.0	15.0	342.0	384.0
8.	1983-84	35	381.5	430.5	15.0	396.5	445.5
9.	Sub-total (4 to 8)		1,362.5	1,537.5	75.0	1,437.5	1,612.5
10.	1984-85	40	436.0	492.0	15.0	451.0	507.0
11.	1985-86	45	490.5	553.5	15.0	505.5	568.5
12.	1986-87	50	545.0	615.0	15.0	560.0	630.0
13.	1987-88	55	599.5	676.5	15.0	614.5	691.5
14.	1988-89	61	664.9	750.3	15.0	679.9	765.3
15.	Sub-total (10-14)		2,735.9	3,087.3	75.0	2,810.9	3,162.3
Grand Total (3 + 9 + 15)			4,261.9	4,809.3	180.0	4,442.0	4,989.3

TABLE 8
States Ranked According to Capacity to Support Education & Educational Development Index 1973

Sl. No.	States (Ranked according to mean per capita income in 1968-69)	Rank according to educational development Index.
1	2	3
A. Per Capita Income (Rs 600-1000)		
1.	Punjab	5
2.	Haryana	17
3.	Maharashtra	6
4.	Gujarat	11
5.	West Bengal	10
B. Per Capita Income (Rs 500-600)		
6.	Himachal Pradesh	12
7.	Assam	9
8.	Tamil Nadu	2
9.	Kerala	1
10.	Karnataka	8
11.	Andhra Pradesh	13
12.	Tripura	7
C. Per Capita Income (Rs 400-500)		
13.	Orissa	14
14.	Uttar Pradesh	18
15.	Madhya Pradesh	15
16.	Manipur	3
17.	Rajasthan	16
18.	Jammu & Kashmir	19
19.	Nagaland	4
20.	Bihar	20

Source: See text.

TABLE 9
Co-efficient of Equality for Scheduled Castes and Scheduled Tribes in Different Categories of Institutions, 1960-61 and 1970-71

Sl. No.	Institution	Co-efficient of Equality			
		Scheduled Castes		Scheduled Tribes	
		1960-61	1970-71	1960-61	1970-71
	1	2	3	4	5
1.	Primary Schools	77.5	84.9	69.0	75.0
2.	Middle Schools	52.9	57.0	41.4	46.6
3.	High/Higher Secondary Schools	41.2	47.8	14.9	23.9
	All Institutions	64.7	66.7	54.0	54.5

Source: Based on data of the Ministry of Education.

B. D. Nag Chaudhury

Some Problems of Technical and Medical Education

THE TECHNICAL AND ENGINEERING EDUCATION of our country was patterned by the requirements of shop floor supervision in the industries of the 1920s and 1930s such as sugar, textiles, soap and other chemicals, metallurgical, and some engineering fabrication. Even in civil engineering where some very new challenges brought about interesting solutions, the work on new materials or new designs, concepts of structures remained a very small component and, therefore, civil engineering education also was largely training for supervision of brick and concrete works or, to a lesser extent, their designing. Chemical engineering developed initially as an empirical application of the principles of physical chemistry to soaps, oils, and ceramics.

After independence, we have gone forward very purposefully towards the industrialization of our nation and problems of design, problems of new materials and structures have become important. Engineering education mostly tried to accept these new requirements by enlarging the syllabus, not by changing the attitudes and outlook elements of engineering education. A major change was brought about in the conceptual framework in constituting the Institutes of Technology which borrowed ideas from the United States, particularly of the Massachusetts Institute of Technology which had played a significant innovative role. Emulating the MIT, new inputs were encouraged in the IITs by the introduction of a larger amount of the sciences of physics, chemistry, and mathematics in the engineering curricula. Unfortunately much of the innovativeness and outlook of engineering institutions which encourage innovation, applied research,

and development work did not play a significant role in the character of IITs to any large extent at least in the initial years. The other great handicap of engineering education in the country was that the skill elements of the students who joined was quite poor because neither the school nor the home played any part in either encouraging skills or developing skills in the boys and girls. We had, therefore, in engineering education an input of very bright young people who were intellectually very competent, but who were neither very interested in skills nor selected because of their dexterity. The teachers had also not developed the sort of interest in growing skills or in realizing the importance of skills in education. In a sense, therefore, the problem was compounded by the background of the students, the outlook of the teachers, and the foresight of those who administered technical education. We have today a very uneven picture in which our best engineering education is intellectually competent, but skill-wise more or less deficient even in the best of our technological institutions, the IITs.

I WOULD LIKE TO GO INTO THIS PROBLEM a little more in depth so as to understand the possibilities of restructuring of engineering education which might be worth considering. The concept of professional education has its inception in the guild system of the craftsman and professional practitioner. At first it was the master craftsmen who ran the guild, taught the skills and the approach, and developed a code of conduct both professional and personal for the would-be members of the guild. Later, as scientific development began to enrich technology, the craftsmen or at least the best amongst them accepted the new innovations and used them. They built a bridge to science. The bridge was crossed both ways – technology and craft enriched science and science enriched technology, men of science could cross the bridge to become master craftsmen and vice versa. Thus as professional education became institutionalized as in the London City and Guilds (even the name is reminiscent of its past) doses of science became incorporated in ever-increasing measure. As societies changed and the impact of technology became substantial, they released social forces. These social forces have become a major factor which has led technologists to be conscious of their social obligations and responsibilities. Thus it has come about that the technologist has not only social responsibilities and scientific training and attitudes, the modern technologist has several other roles to play in a modern

society. One capability is that of development, another of design, and a third of innovation. These are engineering capabilities which can be fostered and developed.

Next, the engineering technologist requires to have a profound knowledge of materials for carrying out his tasks and for this he needs an insight which he gets through physics and chemistry not only to understand the possibilities of the materials already available, but also to be able to think out the potentialities of new materials that have become possible through the availability of various kinds of natural and prepared substances. Third, he requires a knowledge of tools and techniques which will enable him to use his materials in the designing and the development or in the innovations that he wishes to carry out. None of these three different ingredients that he needs in order to be a good technologist can be acquired by the study of any science or any engineering discipline in the abstract. A course in materials, for example, needs to be a composite course in which chemical engineers, chemists, physicists, and mechanical engineers have a role to play. Similarly, the transport phenomenon is important in teaching a variety of engineering sciences such as chemical engineering, mechanical and aero sciences. Concepts of electromagnetism, mechanics, thermodynamics, and kinetic theory of gases are all basic to the study of transport phenomenon and as such to all of engineering education.

In the changing social, economic, and cultural situation in our country the basic attitudinal changes of professional education have to be examined in relation to the new content that is recommended. Unfortunately, this basic problem of professional education has been to a large extent bypassed even in reports such as that of the Education Commission which enumerates a large number of educational reforms relating to professional education without examining these basic premises.

The profession, as a guild or as a group with special interests, is destined to decay. Partly this will be due to the increasing number of various kinds of technical expertise that will develop, for example, in the computer sciences or aviation technologies or in many others yet to come. Partly, also, this decay is inevitable since the clearly felt guild interests will be greatly reduced in the context of a highly egalitarian and socialist society in which criteria will be increasingly in accordance with what the profession gives to society in relation to perceived social needs. Receiving more and more emoluments from society will have to be compatible with what others who contribute to society also receive.

The new philosophy of professional education will, therefore, tend to be much less guild-oriented and much more socially oriented. In the new social orientation each society looks to technologists for alternative technologies which are more appropriate to social needs and capabilities.

THE QUESTION OF SUCH ALTERNATIVE TECHNOLOGIES which are appropriate to the needs and capabilities of our society in medicine or in engineering may tend to move away from the professional education which has developed into a stereotype of mainly British and to a lesser extent American professional education. In such an education the new aspects automatically come to occupy an important place.

The first is the social pressure which will increasingly demand these areas of expertise which fit in the concept of a needed service to society and paid for by society to the extent that society values it. In addition there will be pressures to keep emoluments compatible with the general wage and salary structures and reward systems of the society.

The second aspect is that expertise cannot function in a very narrow sphere any more. It has to take into account the relevant knowledge and skills of other contiguous areas and, therefore, expertise must work cooperatively as part of an entire scientific and technological machinery in the country and not as part of a small group of experts trained in one particular skill or technology. This also means that the expert will require significant awareness of many other fields of science and technology as well as some of the social sciences to be able to operate effectively in this large cooperative machinery. His own personal predilections will have to be modified to a substantial degree through interconnections with others.

Education and training, to take into account these aspects, will necessarily be substantially different from the professional education that we now see in our country. The specialized content of education is not only the learning of special knowledge and skills but more the training to create an ability to develop such skills or technologies as may be necessary for carrying out future tasks. This kind of training is somewhat more difficult to encapsulate but has the advantage that it is flexible and more adaptable to a fast-changing base of technology than the earlier and more classical training in various facets of engineering education or medicine. Basic sciences, mathematics

drawing and materials sciences will still remain important in technology. But the stress moves away from such exercises as laboratory electricity and electrical machines or specific types of routine collection of data on mechanical machines. The engineer of tomorrow will have to design machines to do specific jobs and not necessarily work on standard machines.

The social aspects so necessary for his future performance will, probably, find a place in formal training where sociology, economics, and even physiology may be introduced in the curricula and brought in as exercises in some of the experimental and project-oriented work in technology that a student is expected to do. The medical student may also need some technology and economics. On the other side, a greater understanding of design of materials and techniques used in the processing of materials will tend to become far more important. He will be trained to be more receptive towards new materials and more innovative in the use of traditional as well as new materials.

The devising of courses in which four different groups of people trained in four different disciplines will cooperate to a common purpose is, in our educational administration, a difficult problem. It often happens that the knowledge of many disciplines and several skills exist in an institution, but they are so compartmentalized that it becomes difficult for administrators to bring them together across the mutual potential barriers that exist.

Innovation cannot be taught in a classroom. There is no place available other than an engineering institution where a student can, outside his class hours, go and play with various materials and various processes to be able to encourage his innovative desires. Unfortunately in engineering institutions such possibilities are not usually encouraged. It is legitimate to demand a certain minimum familiarity with a skill that may be required to handle materials or machines so that when he does so freely and innovatively, he does not create hazards for himself or for others or for the machines he handles. Beyond this, encouragement of his innovative spirit is likely to help his design and development capabilities.

In carrying out any serious engineering task nowadays technologists require the cooperation of many kinds of engineers from various disciplines not bonded together necessarily by a hierarchical system, but certainly bonded together by a common purpose, by the understanding of each other's limitations, and by their usefulness to one another. Activities which are designed to encourage some of these

capabilities to develop by involving students of more than one engineering discipline into cooperative groups to carry out projects or tasks in the last couple of years of their training is a feature which does not exist in any engineering institution that I know of. Yet in some of our commonest technological enterprises mechanical, electrical, chemical, and civil engineering activities interact with one another. Propulsion, for example, brings in the chemical engineer, the chemist, the mechanical engineer, and the electrical engineer. We do not train propulsion engineers, but we do train all these four kinds of engineers to work on propulsion systems whether in air, in water, or on the ground.

IN A DIFFERENT CATEGORY are the problems of engineering and technology which are of consequence to the vast rural population of our country. Problems of shelter, water, sanitation, communications, and transport, have both social and engineering aspects. The technology to solve these problems at a cost which the country can bear has yet to be devised. The sad part of it is that there is not enough effort in the country attracted towards the innovative technology that would be applicable to the solution of these problems of the hinterland. The question that arises and is left unanswered is who should take the responsibility for going into this vast area of rural technology development at an appropriate cost. There is in the past two or three years some interest and effort in some of these problems in our research system even though this effort is still very small and somewhat superficial. There is no strong interest in some of these problems being incorporated in the content of our curricula or in the training of engineers at the teaching institutions so that they accept the need to develop such capabilities. Our urbanized engineering education suffers from a serious limitation on its capability to respond adequately to many of our rural problems.

In the restructuring of engineering education one would like to start with two basic introductory proposals: the first is essentially as to what might be done in the very first year of his training – for example, exposure to the development of a variety of manual skills inside a laboratory as well as outside; and, second, an exposure to the rural situation with regard to rural houses, their structures, energy and water supply, utilization of spaces, transport, efficiency of rural use of fuel and so on, so that there is a conditioning of the young mind to the two basic parameters of his intellectual growth in the future. We can

build him up and expect him to think with his fingers and think in terms of problems which face a large sector of the population in a quantitative and scientific manner.

Another part of structuring the courses would be to not only have the single separate streams of discipline in the first few years of training, but also have courses which overlap disciplines and introduce him to the idea of using the knowledge gathered from more than one discipline to the solution of more than one problem. Such courses would require some effort to formulate but are neither too demanding nor unduly difficult.

Very often a student comes across the same topic in different forms in several disciplines. He learns about elasticity in physics, in mechanical engineering, in textile engineering, and in chemical engineering. He learns about lubricants in chemical engineering, mechanical engineering, and in chemistry, perhaps a little bit about it in physics, in most institutions. The integration of all these into one package in which teachers from more than one discipline can contribute to the teaching would ensure that the student does not acquire small bits of the same knowledge in an unrelated manner and therefore find it more difficult. It can also reduce the time he has to give to it. Emphasis on project work which tends to produce effective and usable results of benefit to the institution and encourages group activities would give a very sound basis of training. Unfortunately it is rarely used in our country as a teaching technique. A small building of the university or of the institute can be designed, developed, and made by students and teachers together which would give a certain reality to the training and would also give them the satisfaction of having done something useful for their institution. (Booker T. Washington University prides itself in having done so in its early years.) This can be extended to many areas of laboratory facilities, equipment for the classroom, assistance to the institution, community, or even to the larger outside society.

The pattern of industry that our students are generally taught in the classroom is mainly that of the private industries. To some extent in various fields they become aware of the government as an agency primarily in the areas of civil engineering. The public sector industries, which today have a commanding position in the entire industrial structure of the country, have yet to be a source of major inspiration to the engineering colleges and institutions. The interaction between public sector industries and the IITs or universities remains quite

small. Any restructuring of engineering or medical education implies not only setting down the new parameters that might be taken into account but in addition one must investigate what possibilities exist to bring in new parameters of consequence.

IN THE SEARCH FOR ALTERNATIVES, social imperatives will play a significant role. Professional education will, under these imperatives, tend to get more oriented towards basic questions of energy use, ecology, and human relations. In particular, those facts of these questions which tend to distort the use of natural resources, both renewable and non-renewable, and create social or economic problems in the long run even if they solve a problem in the immediate future will need attention. The teacher of engineering may find it difficult to bring some of these factors and perceptions into his teaching without some assistance. This help can come from teacher workshops. However, the gain to the teacher if he makes the effort can be important and valuable, more so, if it comes out of a teacher's own experience. This may well require in the future that teachers of engineering and technology alternate between research and teaching and actual experience in programmes of work in technology, engineering or health or in other areas of activity in society. This may call for a greater effort on the part of the teacher. However, such effort will be worthwhile as it will give him a wider perspective and a knowledge of the various cooperative and managerial functions as they operate in carrying out various developmental and social tasks.

A structural engineer who is required to build a bridge, for example, will not only have to look at the problem of building a bridge, he will also have to make a choice between steel and concrete, and locate the exact site, the cost, and the time. These are problems which are familiar to some extent. In addition, he will have to understand something more now. He cannot ignore the functions of the bridge or the transport system that it will help or hinder. He will need to know something of the soil structures and composition, of how the bridge is going to affect the river flows, the topography, and seismology of the surrounding area. He may even have to deal with problems of ecology and aesthetics of the two sides of the river between which the bridge provides a connection. If his training in the earlier years at college has sensitized him to view these problems, he can contribute more effectively in carrying out the design and construction of a bridge.

A problem that the scientists and technologists of our country will

increasingly face is that the material and energy resources are going to be somewhat in short supply. The use of resources, particularly the material and energy resources, has therefore to receive a critical review to see that they are used optimally without wastage, apart from such factors as increased cost. On the other hand, our human resources are large and our technological resources are increasing. For example, today the scientific and technological manpower in the country is very large – considerably over a million and larger than that of any country in the world except the USA and the USSR. This large scientific and technical manpower is a great source of strength if it can be effectively deployed. Effective deployment, however, means that it results in greater economy in cost or materials or perhaps both and creates more wealth for the nation at less investment. This means that education should have a fairly large component of skill and an even larger component of training in the ability to acquire skills and build appropriate human relations. If we want to convert the large manpower in our technological system into a source of strength, then we can use the educational system not to reduce the amount of manpower we produce but to produce as many as we can legitimately and effectively produce with a training in a new outlook, an outlook in which the education they receive is not only academically good but also intellectually and physically tough and socially oriented.

Softness is easy to acquire in a society such as ours and in the educational system we have. It is more difficult for our educational institutions to toughen the intellect, the mind, and the body in the process of education. Courses that toughen the intellect are courses which do not seek to teach the students how to answer questions but to ask and analyse the questions themselves.

Many problems of engineering, technology, or medicine are in the final analysis partially sociological. Very few students or even teachers of our engineering education or other professional education are made aware in the learning processes of this dimension. The structuring of a new professional education should include an understanding of the sociological and human aspects of its interaction with society and the cooperative imperatives in the actual performance of tasks. Leaders of professional, technological, and scientific education will need to think constructively to find new structures of education appropriate to the many-sided demands that will be made on the young technologists and create in them the confidence to accept and work on the new tasks that the developmental needs of the nation call for.

T. A. Mathias

Christian Educational Effort in India

IT IS AN INTERESTING FACT that all civilizations, countries, and religions there has been an instinctive appreciation of the religious importance of education. This explains why there is an almost universal acceptance of the idea that teaching the young is a sacred responsibility, peculiarly suited to religious men and women. This is perhaps due to the idea that education completes the work of the Creator by building up the mind, the heart, the personality of the young. This is why the first teachers were monks and nuns whether Muslim, Hindu, Buddhist, or Christian. The monks of Europe were that continent's first educators who transmitted sacred and profane knowledge to the young. All the great universities of Europe, Oxford, Cambridge, Paris, Louvain, Padua were originally founded and maintained by the Church. The Gurus of India and the Bikkhus of Buddhist countries performed the same teaching task. They gathered children around them; instructed them in secular and religious knowledge; and simultaneously trained them to a religious way of life. Hindu attitudes went very far in this matter: the guru was considered to be not merely a teacher but also a spiritual leader and guide; his pupils were called "chela" or disciples, who owed him docility, reverence and filial love.

Theological Basis for Christian Educational Work

THOSE WHO ARE NOT CHRISTIAN often fail to understand the reasons behind the Church's urge to establish educational institutions. Too often it is assumed that the basic motive is a desire to wield power, exercise influence, or make money. Few realize the deep theological

considerations that underlie Christian educational work. It may be useful, therefore for us to begin with a brief mention of these.

It is a well-documented historical fact that from the earliest times, in every country where the Church spread, one of her first concerns has always been the religious formation and human education of her children. This was not, at the beginning, a thought-out response to the felt needs of the situation, but rather an instinctive reaction coming from the inner dynamism of the Spirit. It was only later that the theological justification for this educational involvement was articulated, Christian theology states that the mission of the Church is to bring Christ's life to men and indeed to be Christ's incarnate presence prolonged down the corridors of history. This means that the function of the Church is to transmit a new life, not merely a set of doctrines, a moral code or a system of religious practices. Now a new life with the intellectual, emotional, and spiritual fullness it connotes is best communicated in and through the normal process of human development, i.e. through education.

Integral Christian formation which is the business of the Church does not consist only in imparting knowledge of Christian truths, nor in superposing Christian habits on a purely naturalistic, human way of life and thought, but in helping the Christian to think and act like Christ. This is the significance of St Paul's oft-repeated injunction: "Put on the Lord Jesus".¹ In other words, human and religious formations cannot ideally be either parallel or successive, but should interpenetrate each other, so that the child grows simultaneously in human and Christian knowledge and maturity.

To put the matter in another way, the "new life" communicated through Baptism, the Christian rite of initiation, and sustained through Christian practice is supernatural, but not something superimposed on the natural life, so that the Christian has in some sort two kinds of existence running side by side. The supernatural builds on, interpenetrates and transforms the natural producing one being, both human and divine, belonging to this world and to the Kingdom of God, fully human and therefore also fully Christian. It would be a complete distortion of Christianity to view its teaching as aimed at the destruction or atrophy of all that is human in man, though such has sometimes been the misconception that people have put on the Christian endeavour. Briefly, just as the Christian life is a blending of

and a tension between the natural and the supernatural, so also Christian education is the result of a blending of and a tension between the normal education of the child and his training in the Christian life.

Christian Educational Work in India – Early Initiatives

THE HISTORY OF CHRISTIAN EDUCATIONAL INVOLVEMENT in India is as fascinating as the history of Indian Christianity itself. It is commonly believed that Christianity in India was founded by no less a person than one of Christ's own immediate disciples, Thomas, who is thought to have arrived in Kerala in the year A.D. 42 and died in Madras in A.D. 73. Though there are no written documents to confirm this belief, it would be very foolish indeed to dismiss the ancient and continuous tradition on which it is based. The whole of Indian and indeed Asian history is built upon traditions, not documents since ours is an oral, not a written culture.

We have no evidence about the type of education which the early Christians of our country gave to their children, but there certainly must have been organized arrangements for the teaching of religion together with the elements of reading and writing. Otherwise the faith could hardly have survived through 1,500 years when the tiny Christian minority swamped in a Hindu mass had minimal contacts with fellow-Christians in other countries. When the first Jesuit missionaries arrived in Kerala around 1542 they were astonished to find that Christian belief had been safeguarded in its purity and the Bible was known and used. This could only have been achieved by some form of organized religious and secular education.

The first Christian educational institution, properly so-called, was founded in Goa in 1540 when the great missionary Francis Xavier took over St Paul's College "for the intellectual and spiritual training of young natives and their preparation for the priesthood".² This was probably the first formal Christian educational enterprise anywhere outside Europe. For nearly two centuries, however, it had few successors in India. It was only after foreign colonial powers started entering the country that organized Christian educational work began in a serious way.

The first missionaries to start regular schools for general education were the Danes working in the Madras Presidency. Grundler opened

¹ *Epistle to the Romans*, Ch. 13 V. 14.

² Xavier Leon-Dubour, *Letters of Francis Xavier*, Duchesnes Paris, 1970, p. 173.

two schools in 1717. Liernanader continued the good work in Calcutta. From 1742 to 1772, the celebrated Schwartz founded a series of six schools in Trichinopoly, Tanjore, Ramnad, and Sivaganga.³ The purpose of these schools was to teach the English language and other subjects to English and Anglo-Indian children and the children of Indian converts to Christianity. The next important initiative was taken by the famous Scottish trio – Carey, Marshman and Ward – working in Bengal. In 1818 they opened their first school, a vernacular institution in Serampore. The school was later to develop into the Serampore College, an institution of recognized university status in ecclesiastical studies. Carey placed himself under the protection of the King of Denmark and obtained a charter from him.⁴ This was done in the teeth of opposition from the East India Company, which strongly opposed missionary work for fear it would disturb the people and make their task of economic exploitation more difficult. John Company also did not favour education for the natives “lest it should make them less docile”.⁵

It is interesting to note that all these early Christians made a deliberate policy of using Indian languages as medium of instruction and aimed at building up literature in these languages. This policy was explicitly stated in the memorandum sent by Carey to the directors of his missionary society. Admittedly, Carey was thinking mostly of Christian literature, but in one of his letters he also clearly mentions that the development of Indian languages was a worthwhile objective to be aimed for its own sake. Carey, Marshman, and Ward also clearly perceived that the better education of Indian students required the use of their own languages and in the process these languages themselves would become vehicles for conveying modern thought and Christian knowledge.

Introduction of English

IT WAS ONLY MUCH LATER IN THE CENTURY that the British missionary Charles Grant advocated the use of English as medium of instruction in Christian schools in India. The reasons he adduced were

3 J.P. Naik and Syed Nurullah, *A Student's History of Indian Education*, Macmillan, pp. 35-36.

4 *The Story of Serampore and Its College*, Serampore College, Serampore, pp. 16-17.

5 Syed Mahmud, *History of English Education in India*, Macmillan, 1950, pp. 11-13.

two: the use of a superior language like English would improve the intellectual quality of the “Hindoos”, and the study of English literature would surely lead to their embracing Christianity.⁶ A century and half later, we know how false such a simplistic view was!

Grant was also the leader of the agitation in England which in 1813 forced the East India Company to be more tolerant of missionary work. The charter which resulted marked a new and much more dynamic phase of missionary involvement in education. Moreover, the Macaulay minute of 1835 which finally decided in favour of English education as against “oriental learning” and the Hardinge resolution of 1844 prescribing English as a necessary qualification for service under the government, turned missionary endeavour completely away from the use of Indian languages and towards the use of English.

It should also be noted that from the time of Carey and his companions, the idea of using schools as a means of evangelization became something accepted. This was prominent chiefly among Protestant missionaries, large numbers of whom were English and, therefore, had a natural advantage in the use of this language and a deeper appreciation of the “Christian” quality of its literature. Among Catholic missionaries, the position was not so clear. Very few of them were ever British. Not surprisingly, therefore, they were less convinced about the intrinsic educational value of the English language. They also felt that if British literature were indeed a “Christian” literature, its natural tendency would be to draw readers rather to the Protestant version of Christianity. Hence there was suspicion on the part of Roman Catholic missionaries about relying too much on the English language as a means of attracting educated Indians to Christianity. However, Catholic institutions also did adopt English for the simple reason that it had become virtually compulsory and was an essential requirement for a position under government which most educated Indians were then striving for.

We cannot conclude this section on the use of English as medium of instruction in Christian educational institutions without recalling what a departure it represented from the traditions of Christian missionary work established till then. From the very beginning of the missionary era, i.e. from the arrival of Francis Xavier in India in 1540, missionaries had given themselves diligently to the study of India:

6 Ka Naa Subramaniam, *The Catholic Community of India*, Macmillan, India, 1970, *passim*.

languages, not only because this was indispensable for any serious missionary work, but also because many of them were scholars who recognized the value of these languages, their ancient origin, their original grammar and structure, their rich vocabulary. Many missionaries made notable contributions to the development of our languages. Several became masters of the literature, translated the classics into European languages, and even made their own literary contributions. Notable among these were: Roberto de Nobili and Constantius Beschi in Tamil Nadu. The former lived in the second half of the 17th century and the latter in the early 18th. Both adopted Indian names and were respectively known as "Tattuvar Podagar" and "Arulanandaswami"; they produced remarkable works in Tamil and, in the case of De Nobili, in Sanskrit also. Beschi's *magnum opus*, the epic poem *Tembavani* is considered a Tamil classic even to this day. He also contributed much to the development of Tamil grammar and script. These great scholars were succeeded in the 19th century by G.U. Pope who was widely known in Tamil as "Pope Iyer" and was the author of one of the earliest systematic modern grammars. In Maharashtra, the English Jesuit, Thomas Stevens, was responsible not only for producing the first modern grammar of Marathi, but also wrote extensive poetry in that language.

This great and noble tradition has continued to this day and men like Bulcke in Ranchi and Valles in Gujarat have attained a nationwide reputation for their writings in the language of their adoption. However, it must be stated that the decision made by the missionaries since 1835 to use English almost exclusively as medium of instruction in their schools persists in a fair number of Christian schools, about one-eighth of them, even to this day; and in the public eye, Christian schools are often associated with the English language. This is not necessarily an evil, for there is no doubt that one important contribution that can be made to the better education of Indian youth is to help them acquire a good knowledge of a world language like English.

The policy initiated by Macaulay in 1835 to start a public educational system in this country was indeed a fateful decision for the future of the nation. It started a process which continues to this day and which may never be reversed, the process of imparting Western education through the medium of a foreign language. The opening of the first three universities of Calcutta, Bombay, and Madras in 1857 further strengthened this trend. Pundits may discuss

the pros and cons of the system, but one thing is certain: it has been responsible for stagnation in Indian culture, a loss of creativity (as imitation of the West became the fashion), and the creation of one more division in the Indian population between those who think, read, and write in English and the masses who use only their own languages. This division has further strengthened the elitist and basically inegalitarian structure of Indian society. Though the study of English literature, as Macaulay himself recognized, probably hastened the demand for independence from colonial rule, this advantage must be weighed against the profound national problems created by the system of education initiated by the British nearly 150 years ago.

Expansion of Christian Educational Work

WHEN THE EAST INDIA COMPANY and later the Colonial government realized that it was inescapable for them to organize a system of education for the people of India over whom they now ruled, they also decided that governmental expenditure for the purpose would be reduced to the minimum. This was the basic reason for the introduction of the grant-in-aid system which was intended to encourage private enterprise in the field of education. The system also fitted in well with the affiliated college structure that was adopted for the universities in 1857. Incidentally, the countries of the Indian subcontinent are the only ones in the world to have such a quaint university structure with all the enormous curbs it imposes on freedom and enterprise in educational endeavour. Even the London University on which the Indian universities were modelled in 1857 abandoned the affiliated college structure as defective two years later! Yet here we are clinging tenaciously to the whole antiquated and soul-killing system a century and quarter later!

Missionaries were the first to jump at the opportunity provided by the decision of the British rulers to welcome and to subsidize private initiative in the educational field. From 1835 onwards Christian schools were opened all over the country and many of them were later raised to the level of colleges affiliated to the three universities when these were established in 1857. Several of these institutions such as Madras Christian College (founded in 1839), St Joseph's College, Trichinopoly (1844), St John's College, Agra (1850), St Stephen's College, Delhi (1880), Scottish Church College, Calcutta, Christ Church College, Kanpur survive and are highly regarded to this day. In fact till the beginning of the present century "missionary

institutions" played a dominant role in the education of young India. Till 1920 there was a rapid growth in the number of Christian schools and colleges throughout the country, chiefly among the Protestant denominations working in north and central India. After 1925 the tempo began to slow down. The reasons for this were twofold. First, it became clear that the resources of the small Christian community were already over-extended in the educational field. Thus the celebrated Lindsay Commission which reviewed the work of Christian colleges in 1930 recommended the closure of several Protestant colleges, so that the rest might be brought to higher standards through a concentration of personnel and resources. The second reason was a debate that had started towards the beginning of the century within the Christian community (chiefly among the Protestants) about the evangelical effectiveness of educational institutions. The debate went against the schools and colleges as one might well expect if the word "evangelization" is taken in the narrow sense of leading people to embrace the Christian faith. It would require a further 30 years before a new understanding of the objective of Christian educational work would emerge. Stress would no more be laid on evangelization in the narrow sense of the word, but rather on development, building of values and character, service to the nation, all of which can be construed as "evangelization" in a broader sense.

Present Involvement

THE DAWN OF INDEPENDENCE represents another landmark in the history of Christian educational work in this country. As if to give proof of their complete confidence in the future of Christianity in this land and their trust in the tolerance of their Hindu fellow-countrymen, the Christians of India proceeded to expand their educational work in a fantastic way. This was also a direct result of the generous guarantees given by the Constitution of India which provided, in Article 30, that all religious and linguistic minorities shall have the right "to establish and administer educational institutions of their choice". Moreover, the High Courts of India and the Supreme Court have defined the significance of the above article in over 30 important judgments. In every case they have upheld the right of a religious minority to receive grants like any other institutions without any discrimination, and at the same time to enjoy freedom to administer their institutions without excessive interference from the state. This freedom has been defined as pertaining to the admission of students,

the selection of staff, the appointment of governing bodies, and the general administration of the institutions. The state is, of course, permitted to lay down regulations, to ensure that these institutions like all others are properly run; for, as one of the judgments states: "The right to administer does not include the right to maladminister." However, it has also been laid down that the restrictions imposed should be reasonable and in the interest of the minority institutions themselves.⁷

These judgments and, above all, the high appreciation shown by the public for Christian schools and colleges are mainly responsible for their extraordinary growth in numbers since 1947. The expansion is most evident in the case of the Catholic Church whose institutions have increased in number by over 250 per cent in the past 30 years. The *Catholic Directory* of 1969 (the latest to be published) shows that the Church conducted in that year 7,072 primary schools, 1,198 secondary schools, 114 colleges, 183 technical schools, 74 teacher-training schools, besides other specialized institutions such as schools for the handicapped. The total number of students being educated in these institutions was nearly 2,400,000 of whom about 55 per cent were Christians and 47 per cent were girls. Accurate statistics for the Protestant and Orthodox Churches are difficult to come by; but without too much error we may take it that quantitatively the combined educational effort of other denominations is about half that of the Catholics. This would mean that the Christian community of India, which in 1969 numbered about 14 million, was responsible for the education of 3,500,000 of India's children, nearly half of whom were non-Christians. As J.P. Naik once remarked at a meeting, Christian educational enterprise is larger than that of several States of the Indian Union. If university education alone is considered, the magnitude of the Christian effort is particularly striking. There are today 184 Christian colleges in India with a total strength of 180,000 students, an enrolment greater than that of any Indian State except Bihar, Maharashtra, Uttar Pradesh, and West Bengal. In fact, one out of every 20 university students of India studies in a Christian college, though these colleges number only 184 out of a total of nearly 4,000.

Since 1970 the expansion in the number of Christian schools and colleges has been much slower for the same reason as before, viz.

⁷ Cf. *Minority Educational Rights in the Indian Constitution*, AIACHE, Delhi, 1973.

over-extension of human and material resources. Besides, there has been rethinking concerning the value of formal, institutionalized education for the genuine development of the country. The question of evangelization does not now arise owing to new attitudes to this matter on the part of Christians in India and elsewhere.

Christian schools and colleges are not evenly distributed throughout the country. As one should expect, there is a heavy concentration in the southern States, especially Kerala where the Christian population is also proportionately higher. Christian institutions are mostly of the type called "traditional". Thus the colleges specialize in the arts, sciences, and commerce. There are only seven professional colleges – three engineering, three medical, and one agricultural. The immediate explanation of this is of course the fact that arts and science colleges cost much less to operate than professional institutions. But there is also the belief that they are more effective for education in values which is an important Christian concern.

Quantitatively, therefore, there is no doubt that Christian involvement in education in India is massive and wholly out of proportion to the size of the community and its resources in personnel and finance. In fact, there is no nation in the world, whether or not the majority of the population is Christian, where Christian churches conduct so large a number of educational institutions. Not even a country like the USA, the home of private enterprise in education, or the Philippines where Christians form 95 per cent of the population, can compare with India in the number of Christian schools and colleges.

Traditional Objectives of Christian Education in India

It is owing to this disproportionate interest that the Indian Church takes in education that a reaction has now set in, and it is most visible among Catholics. For some years, it is being seriously asked whether the Church should continue to engage such massive resources in institutional education where the output from the point of view of national development is increasingly being questioned.

Another important reason for questions regarding the role and the future of Christian educational work in India is that we are living in an era of the most rapid social change that history has ever seen. Our times are completely different from the last century when the massive Christian involvement in formal education through schools and

colleges began in India. People, therefore, ask whether the objectives with which these institutions were started are still relevant and even legitimate today. One thing is painfully clear. It must frankly be said that today many Christian institutions have no clear perception of their goals and as a result no commanding vision, no clear order of priorities, and no way of responding to questions regarding the meaning and relevance of Christian educational work in India today. Every survey indicates these facts. We may refer only to the ISS-FERES study of Christian Colleges and National Development (1965-67);⁸ the United Board for Christian Higher Education in Asia's survey of Protestant colleges (1967); the Jesuit Educational Association's survey of the Order's 109 schools and colleges in India (1969); the Methodist survey of their schools and colleges (1969-70).

It is clear that many Christian institutions are simply being run as they have been inherited from their forebears; others have been opened with motives such as the prestige, power, and influence of the Church or of a particular group or parish, or to provide employment for Christians. It is doubtful if any of these reasons is sufficient to justify the large outlay in personnel and resources involved. Owing to this lack of clear goals, we sometimes find Christian institutions which continue to run when the resources to conduct a worthwhile school are manifestly lacking! The basic question whether it is necessary to keep going even at the cost of good education is forgotten.

What were the objectives with which Christian schools and colleges in India were founded? The founders had three simple and relatively clear objectives before them: *first*, the education of Christians themselves in an atmosphere which would help them to be good members of their Church and to occupy influential positions in secular society; *second*, to render a service to Indian youth at large and in particular to the deprived sections of Indian society; *third*, to build evangelical bridges towards the country's intelligentsia and thus pave the way for a more favourable attitude to Christianity and perhaps even the acceptance of the faith.

It can truthfully be said that the first and second aims which Christian institutions had before them met with real success. After the Parsis, the Christians form the best educated community in the country with an 80 per cent rate of literacy as against the country's

⁸ Richard Dickinson, *The Christian College in Developing India*, Oxford University Press, India, p. 86.

average of 34 per cent. Scheduled caste and scheduled tribe converts to Christianity have been brought up in an amazing manner. In certain areas of the country such as Andhra Pradesh, Madhya Pradesh and Bihar we have the extraordinary spectacle of former Harijans and tribals running their own Church as religious superiors, bishops, and archbishops. "There are Adivasi members of Parliament as well as of the Bihar legislative assembly, doctors, lawyers, engineers, and officers in the higher ranks in the public services of the country. It is hard indeed to imagine that the grandfathers of these persons lived in the jungles a few years ago, uneducated and in the worst possible conditions."

The objective of serving the youth of the country, particularly those belonging to the deprived sections of society, was also largely met. Christian institutions rapidly became known for the quality of the education they imparted, the dedication of their staff, and their insistence on moral and spiritual values and discipline. It is not surprising, therefore, that a large proportion of the top leaders in the professions, in industry and government administration were products of Christian schools and colleges. The initial fears entertained by Hindu parents that their children would be converted to Christianity by attending Christian schools and colleges rapidly disappeared or were guarded against by careful instruction to the youngsters to have as little contact as possible with their Christian teachers.⁹

Regarding service to the underprivileged. Christian institutions were among the few that admitted Harijan students in pre-independence days, even if they were not Christians. The education of women was another field to which Christian missionaries, quite against the traditions of the country, paid special attention from the beginning. The first Christian college for women was founded in Lucknow 105 years ago by the celebrated Protestant missionary Isabella Thoburn. To this day, the IT College retains its reputation as an innovative and high-quality institution.

The third objective that the founders of Christian educational work in India had before them was frankly evangelical. Schools and colleges were looked upon as an extension of the pastoral function of the Church, as an auxiliary in the task of preaching the Gospel to the nation. It may even be said that gradually the evangelical efficiency of

Christian institutions came to assume greater importance, chiefly in the case of those schools and colleges where the proportion of Christians in the student body was insignificant as in north India. From the beginning this objective was a complete failure, if as we said before evangelization is understood as the actual conversion of others to the Christian faith. Never at any stage were any significant number of non-Christians brought to the Church through Christian schools and colleges. What is more, a realistic appraisal of the Indian situation today must lead to the conclusion that winning converts through educational institutions is a hopeless task, even if it were a legitimate goal.

Relevance of These Objectives Today

HISTORICALLY, politically, socially, economically, and even from the religious point of view, the situation in India today is radically different from the one which confronted the founders of Christian schools in the last century. India is no longer a colony but an independent, democratic socialist republic; it is a secular state at least by law and the aspiration of a fair proportion of its enlightened leadership. In the entire world as well as in this country, science and technology have completely revolutionized man's life, his concepts and his value system; there is a new emphasis on the importance of personality development and at the same time, contradictory as it may seem, on the importance of the community; rapid communications have brought the world closer together; development and justice are seen to be the primary goals of national and international society. Religion seems to have lost its pre-eminence with the emergence of secular and purely human values as having autonomous validity.

Christianity too has witnessed extraordinary changes in the past 20 years. There is a new theological understanding of the role of the Church in the world. The Church now views herself not only as the teacher of the Gospel to humanity, but equally as a pilgrim and a servant of the world, with a mission of service beyond the frontiers of her own community. Purely human values have taken on a different aspect; they are not something to be afraid of or submerged in the "supernatural"; they have an authenticity and validity of their own; indeed, they form the only basis on which a valid spiritual structure can be built.

In the light of these new trends in Christian theology, there is also a new and more irenic attitude to other religions. Among Christians of

⁹ Ka Naa Subramaniam, *op. cit.*, p. 60.

different denominations, there is the realization that what unites them is more significant than what divides. This has produced close cooperation among Christians of all denominations in secular activities, such as education, medical, and social work. Towards non-Christian religions, there is today a great feeling of respect for their spiritual traditions which have sustained the spiritual level of millions of people through thousands of years. There is deeper appreciation of their spiritual insights as expressed in their sacred books and their spiritual methods. The conviction has grown that Christianity can learn from non-Christian religions while also giving to them; so that between the Christian Church and non-Christian religions, the relation today is not one of confrontation but of dialogue. Finally, there is among modern Christians a profound conviction of the basic right of every individual to worship in public or in private as his conscience directs him to do.

Obviously in the face of such changes, those responsible for conducting Christian educational institutions have been obliged seriously to question the relevance of the objectives with which their institutions were founded and to attempt an articulation of objectives that would be relevant today. This exercise has been going on in the past ten years and has produced much fruitful thinking and changed lines of action.

Objectives Today

IN THE FIRST PLACE, it is almost universally accepted today that a *Christian school is a place for teaching and learning and not one for indoctrination in the Christian faith*. Still less is it a place where secular education is offered as a bait to bring about religious conversion. In other words, the school must not be looked upon as an extension of the pastoral function of the Church. Does this mean that a Christian school must be run without any spiritual concern whatever? Obviously not. As explained already, in the Christian concept of life, the spiritual and the human are inextricably intertwined and each requires the other. A Christian school today should, therefore, be conducted in such a way that the spiritual concerns that Christianity stands for and the vision of man as found in the life and teachings of Jesus Christ are embodied in the atmosphere and the whole running of the school. There is in this concept the conviction that Christianity, one of the religions of India, has a definite contribution to make to the total development of a human person. To

make this contribution, without narrowness and above all without hostility or even indifference to other religions, is a legitimate objective of Christian schools and colleges. In this way, they will be "giving witness" to Christ and his teachings.

If we were asked to put in a single line the objective of running a Christian school today, we would say that it is to produce intellectually well-trained, morally upright, socially conscious, spiritually-oriented men and women for the India of today. This objective includes all that students of a Christian school might have whatever their religious affiliation might be. This statement of objectives is the same as the statement made by the Catholic Church's declaration on education which affirms that the Catholic school must "contribute to the total formation of the human person in the perspective of his ultimate goal and at the same time to contribute to the welfare of the societies of which he is a member".¹⁰

What are the implications of the above statement? It means that the primary purpose of a Christian institution is to give a total education which will enable the student fully to develop his personality and use his talents and abilities for his own complete welfare and for that of the society in which he lives. The Christian school must first and foremost, like any other good school, produce young men and women able to think for and act for themselves from principles which they understand and freely hold; men and women who have commitment to society and to their neighbour. In other words, a Christian school would not be fulfilling its primary purpose if it did not impart a good secular education, even if large numbers of its Christian students became saints every year and large numbers of its non-Christian students embraced the Christian faith; just as a Christian hospital would not be worth running if most of the patients in it died, even though they died in a pious and spiritual manner!

However, the Christian school attempts to impregnate good secular education with spiritual and moral values and to orientate it through reference to the Christian vision of man and his relationship with God, with himself, with other men and with nature.

Service to the Nation

CHRISTIAN SCHOOLS conducted along enlightened modern lines in keeping with these ideals can surely render a notable service to any

¹⁰ Declaration on Education, No. 2 in *Documents of Vatican II*, St. Paul Publications, Allahabad, 1960.

nation. In fact, service to the nation is today perceived as an extremely important objective of running Christian schools and colleges in India today. This is understandable when one realizes that education is the most important single factor for the economic growth and integral development of poor nations; for "development cannot be limited to mere economic growth; in order to be authentic, it must be complete integral, that is, it has to promote the good of every man and the whole man".¹¹ Now the Church believes it is her specific mission in the world "to lend her help to all peoples in promoting the complete perfection of the human person, the good of the earthly society and the building-up of a world that is more than human while also being fully and authentically human".¹² Rendering this special service to the community in the spirit of Jesus Christ is one of the principal purposes of Christian schools and colleges today.

It is owing to a keen perception of this objective of serving the nation that the Christian colleges of India conducted in 1965-66 a national survey to determine how they had served the development of the country in the past and could do so in the future. As a result of this survey, the All-India Association for Christian Higher Education was founded, one of whose clear objectives is to enable Christian colleges to maximize their service to the nation by delivering a type of education which would be marked by quality, relevance, and creativity. In the same spirit, the Association aims to assist Christian institutions to move out of themselves and act like a catalyst in the general improvement of higher education in the country. Christian schools and colleges today have nothing like the inward-looking, defensive attitude which sometimes characterized them in the past when they were content to be islands of excellence in a sea of mediocrity. They now recognize that if they are to maximize their service to the youth of India, they should move out to others in fraternal cooperation. This is why there are very few seminars, courses, institutes, etc., conducted by Christian institutions and associations to which others are not invited.

Service to the nation has also propelled Christian churches to take a hard look at the necessity for running so many schools and colleges of the traditional type. It is felt that Christian educators must recapture some of the pioneering spirit that characterized them in the past when

¹¹ *Ibid.*, No. 1.

¹² *Ibid.*, No. 3.

they boldly went out to educate Harijans and women, when they introduced physical training and moral and spiritual education in their curriculum. Today the need is for non-formal education, for it is recognized that formal education simply cannot cope with the vast and growing needs of the Indian people. It is not surprising, therefore, that the churches are moving strongly into this area and that a virtual moratorium has been called on the opening of the traditional kind of schools and colleges. Again, in the spirit of service to the country and its youth, Christian churches today recognize that their own power of doing good will be multiplied manifold if they cooperate closely with others in the educational field. This is being increasingly done throughout the country.

Social Justice

ONE OF THE MOST IMPORTANT ASPECTS of the dramatic social changes taking place in India today is the awakening of the masses to their human rights and to the fact that they have been victims of exploitation through countless generations. Owing to communist and socialist propaganda, the spread of education and literacy, the influence of the West, and of Christianity, the passive acceptance of misery and degradation as unavoidable *karma* is yielding to strident demands for a proper share in the wealth produced through successive Five Year Plans and developmental projects. The people are becoming "conscientized", to use the words of the celebrated Brazilian educator and social worker, Paulo Freire.¹³ Though this process carries with it the seeds of possible violence and social disruption, it is surely something that everybody should rejoice at, not only because it is the right thing but also because only with genuine social justice can we expect the economy to grow and all-round development of the nation to take place.

Christian institutions have in the past ten years become acutely conscious of their responsibility to promote the cause of social justice. Most of them are now aware of the fact that owing to their own success and the consequent popularity they enjoy among the rich and powerful of the land, they are subject to increasing pressures from these classes for the admission of their children. They realize also that the criterion for admission used till now, i.e. "merit" or, more exactly, performance in examinations, results in the admission of children of

¹³ Cf. Paulo Freire, *Pedagogy of the Oppressed*, Herder, New York, 1970.

the upper classes. Much thought has gone into revamping admission policies, transforming the atmosphere of the institution, arousing social consciousness among the students, and thus making the institution an instrument for producing agents of social change in this country.

There are several eminent non-Christian personalities in India who believe that Christian institutions are peculiarly capable of helping the people of India to become more socially conscious. Thus J.P. Naik says: "One of the best things that has happened in the history of modern India has been the confrontation of Hinduism with Christianity. It has been one of the happiest and least painful memories in the life of Hinduism. I do not attach much importance to how many people accept Christianity as a religion; but Hinduism has learnt one great thing from Christianity, the idea that the way to God lies through service of man. I think this is a new concept in Hinduism. We have our ways of reaching God: *Gnana*, *Karma*, and *Bhakti*; but the emphasis on *Seva*, the service of man as a method and an important method of realizing God came through our contact with Christianity."¹⁴

Christians should accept the above words of a great Hindu friend with humility and thankfulness. They should view them not as a statement of achievement, but rather as the enunciation of a challenge. One of the factors that will make Christian institutions a truly worthwhile service to the nation is courageous service of the poor, ignoring considerations such as prestige, and percentage of passes in public examinations. Only thus will they live up to the spirit of Christ who came to serve the poor, the halt and the blind.

Attitudes to Christian Educational Work

THE ATTITUDES OF VARIOUS PEOPLE to Christian educational work in India depend upon the type of Christian school they are acquainted with, their own experiences in dealing with this school, and above all their own basic opinion of the Christian community. We may, therefore, expect extremely varied views to be expressed in different parts of the country and among different people.

Christian schools often face a peculiar dichotomy in dealing with

¹⁴ J.P. Naik, "The Role of Private Enterprise in Education", in *The Christian College and National Development*, Christian Literature Society, Madras, 1967, p. 134.

the public. While many seek admission for their children, many, including sometimes the same persons who seek admissions, criticize these schools and the type of education they impart. The common criticisms are three.

Westernization. This accusation is best expressed in the words of Ka Naa Subramaniam: "The great objection which is persistently voiced about Christian contact and contact with Christian institutions is the fear that they will de-Indianise us, so to say, and make us westernized."¹⁵ The basis for this accusation is, of course, the concept entertained by many Hindus, particularly in north India, that Christianity is an alien religion established during colonial rule. They forget that Christianity is older in India than Islam or Sikhism and that it was established here even before it went to Europe. They also ignore the fact that Christ himself was Asian in origin and that Christianity has consistently claimed that it does not belong to any nation or people. Christians are sensitive to the charge that they are not fully Indian and in the past 30 years have made every effort to ensure that in their schools the study and appreciation of Indian languages and culture are always given the pride of place. Perhaps the best answer to the criticism is from Subramaniam himself, who says: "My own daughter who was educated throughout in convent schools and a college run by Catholic Sisters is a case. She is as Indian as I. And sometimes to my chagrin and regret, she is more Hindu than I happen to be."¹⁶

Proselytism. This is the favourite charge made against everything that Christians do. Whether they conduct schools, edit journals, run hospitals, engage in social work, it is assumed by a substantial number of people in India that the real aim is to convert Hindus to the Christian faith. One can understand the reason for this suspicion on the part of the Hindus, since Christianity is undoubtedly a "missionary" religion. Christ sent his disciples into the world with the words: "Go and teach all nations baptising them in the name of the Father, the Son and the Holy Spirit making disciples of them and teaching them all that I have taught you."¹⁷ However, it would really be a travesty of the fact to maintain that only the desire to convert people to their faith motivates Christians who run schools and other

¹⁵ Ka Naa Subramaniam, *op. cit.*, p. xii.

¹⁶ *Ibid.*, p. xii.

¹⁷ *Gospel according to St. Matthew*, Ch. 28, vv. 19-20.

institutions. In the old days, compulsory instruction in the Bible was indeed part of the curriculum in many Protestant schools and colleges. It was generally willingly accepted by non-Christian students. Today those who wish to attend Bible classes have to produce letters from their parents asking for this permission. On the subject of proselytism, Ka Naa Subramaniam has the following remarks: "Of course, there was talk of proselytism, forceful conversions and the evil effects of compulsory religious training of a Christian kind; but judging by the results, how many passed unscathed through these Christian institutions! And how many did the missionaries convert in the course of the decades and centuries? The good results far outweigh the evil effects – however they are computed."¹⁸

Elitism. The accusation is heard that Christian institutions are intended for the children of the rich and nobody else can frequent them owing to the high fees levied. The charge is more frequent in north India owing to the existence of a fair number of prestigious unaided Christian schools in that part of the country. Since they receive no grants from the public exchequer, they are obliged to charge fairly high fees through which alone they are able to run.

The fact is that no more than 10 per cent of the schools conducted by Christian churches in India are of the high-fee-levying, unaided type. The rest of them come under the grant-in-aid system and charge the same fees as government institutions or none at all where education is free. These aided schools unfortunately do not enjoy the same prestige as some of the unaided ones. The latter are therefore more in the public eye and are responsible for the generalized complaint of elitism levelled against all Christian schools and colleges.

However, as we have already mentioned Christian institutions are today acutely conscious of the role they should play in promoting social justice. Their admission and recruitment policies, style of life, methods of instruction, and indeed every aspect of their life and working are being adapted to the needs of social justice.

It would be wrong, however, to give the impression that there is uniform hostility to Christian educational work in the country. On the contrary, generally people openly express their appreciation of these schools and colleges and hold them up as models for others to follow. Moreover, none of the complaints mentioned above prevents very large numbers of people of all religious faiths and political persuasions

¹⁸ Ka Naa Subramaniam, *op. cit.*, p. ix.

from seeking admission for their children to Christian schools and colleges. The result is that most Christian institutions have the extremely difficult task of turning away the majority of those who apply for admission. It is common knowledge that at admission time, the principals of Christian schools incur the displeasure of large numbers of parents whose children could not be accommodated. This is in a certain sense the penalty of success.

In his foreword to Ka Naa Subramaniam's book, *The Catholic Community of India* the eminent writer Nirad Chaudhury has this to say: "Almost every socially ambitious Hindu wants to educate his children in a Christian school... We seem to proceed on the assumption that the true function of Christianity in India is to educate Hindus and not to offer a particular kind of religious life, which those who hold the Christian faith regard as the highest form of religious life."¹⁹

The pressure put on Christian institutions at admission time is perhaps the highest tribute of the people of India to their belief in the quality of education imparted in these institutions. If asked what particularly attracts them, the answer invariably is: academic quality, dedication of the staff, attention to discipline and to moral and spiritual education. Where Christian schools are unaided they are obliged to charge high fees; yet this does not discourage those who seek admission for their children. Apparently they consider the product well worth the outlay.

Another unconscious tribute to the public's instinctive reliance on the education provided in Christian schools is the increasingly common practice of schools conducted by Hindus, Muslims, and Sikhs deliberately being given Christian names like 'St Francis School', 'St Teresa's School', obviously in the hope of making the public believe that the institutions are under Christian management!

Several students of Indian education, both Christian and non-Christian, agree that the Christian community has rendered two significant educational services to India which are of great importance for her future development. As J.P. Nàik once put it in the course of a meeting held at Delhi: "Christian institutions have on the whole been at the frontiers of education and have shown consistent and relevant pioneering ability; the community has also decade after decade shown

¹⁹ *Ibid.*, p. iv.

an astonishing ability to produce a disproportionately large number of India's competent and dedicated teachers."

There is no doubt that for the future development of the nation these two educational services are of supreme importance and every Christian institution should ask itself what it can do to render them more effectively.

It is worth quoting what Naik has written elsewhere:

For many years to come it will not be possible for us in India to provide at the school stage salaries which will attract really able and talented men and women; but groups like the Christians can induce dedicated and competent people to work at the school stage; and such a concentration at the school stage will probably pay rich dividends as a service to the nation. Christian schools have been able to infect a large number of non-Christians with a sense of dedication and commitment to education. So far as selling the Christian religion is concerned Christian work is not very commendable. But in selling commitment to social service, commitment to education, Christian work has been simply wonderful. Many non-Christians who are working today in non-Christian institutions who have been students of Christian institutions have caught the spirit of service, the spirit of commitment in their training. That has been a major contribution of the Christians to the country. For, after all, you cannot achieve anything worthwhile in education unless the teachers are committed men and women. Now this commitment to education can have two sources. It can come from commitment to scholarship, which is a good thing; but when it comes from a stronger motive, like service to society or religion or God, I think the commitment is raised to an entirely different level altogether, and such a commitment is what Christians have been able to achieve for a number of years and communicate to others. The Education Commission has said that the problems of Indian education can only be solved on the basis of a band of teachers dedicated and prepared to work hard. Only if such a band of teachers exists, is further investment in education meaningful. Only then will men and resources work together for significant national development."²⁰

The Future

CHRISTIAN INSTITUTIONS have been able to grow, develop and make some contribution to the education and the development of India owing to two factors. The first is the acceptance of democracy by the founding fathers and the people of independent India. Recognizing that education in a democracy cannot be a state-controlled monopoly, provision was made in the Constitution for private educational enterprise. Second, the generosity and large-mindedness of the Hindu

majority of India was such that they conceded the right of religious and linguistic minorities to preserve and strengthen their culture and make a contribution to the multi-faceted culture of this country through the establishment of educational institutions. It is this spirit of generosity and understanding towards the minorities of this land that is responsible for Article 30 of the Constitution which safeguards the rights of all minorities to "establish and administer educational institutions of their choice". As long as these two factors remain in the mind and heart of the people of this land, Christian educational institutions have nothing to fear for the future.

In any case, the Christian community of India has long since decided that it would continue to conduct schools and colleges for the general welfare of the people as long as they are permitted to do so. Further, they are convinced that so long as the Constitution of India remains what it is, they will be rendering a service to Indian democracy by insisting on their right to conduct their institutions with a minimum of state interference. The Christian community, therefore, looks to the future with confidence and hope. At the same time they realize their obligation to conduct their schools and colleges in such a way that any fair-minded person would see in them a valuable contribution to the welfare of the nation.

²⁰ J.P. Naik in *The Christian College and National Development*, *op. cit.*, p. 135.

Anil Bordia

Problem Areas in Nonformal Education

The Brahmanical Tradition

INDIAN EDUCATORS HAVE BEEN CONSCIOUS of the irrelevance of the system of education developed by the British for us. It was irrelevant to the needs of the students, to the kind of society free India dreamt of, and to the compulsions of regional and environmental development. The system created a class of people which was in many ways alien to the country and widened the chasm between the uneducated and the educated. Being full-time, school-centred, and bookish it excluded vast majorities of people; being a single-entry system it did not provide any opportunity for those who got excluded at the beginning or dropped out for any reason at a later stage.

At least two serious attempts were made in the past few decades to overcome these limitations. One was basic education and the other was the acceptance of social education as an essential part of the process of community development. However, neither the Central nor the State governments were ever genuinely committed to basic education. In one State all schools were converted into basic or post-basic by merely a change of the school sign-boards. Craft and manual work in the improvised system of basic education were detached additives to the traditional bookish learning and the whole system was excessively dependent on teachers educated in the British Indian schools with insufficient training in basic education methods, and practically no commitment. The idea that social education should be an integral part of the process of community development was hardly ever seriously tried out. Instead, emphasis shifted to technocratic and bureaucratic solutions. Social education became an external imposition designed and implemented by urban-educated and urban-oriented functionaries. Before long social education receded from the

canvas of community development programmes and in due course the concept of community development and panchayati raj itself became a casualty.

The failure of basic education, which had behind it the sanction of Mahatma Gandhi and of almost all eminent educationists of the time, and of social education, which was an acknowledged programme of the government, exemplify the difficulties in the change of our Brahmanical system of education. We have inherited this system from the ancient times and its essential characteristics have persisted during the medieval and British periods of our history. These characteristics are: (a) it has been the preserve of a small minority; (b) it has been esoteric and abstract rather than practical and useful; (c) rather than correlating learning, living, and working, it has maintained and strengthened division among them; (d) its base is a language known only to a few; and (e) for all these reasons it has accentuated inequalities rather than reducing them.

How Far Have We Come?

IT IS AGAINST THIS BACKGROUND that one should view the distance covered in the direction of building an alternative and viable strategy of educational development. As would be evident from the following paragraphs, only a beginning has been made and we are still far from creating a real alternative.

Conceptual Elaboration

ONE OF THE SIGNIFICANT GAINS of the past few years has been a wide understanding of the concept of nonformal education as something qualitatively different from the existing system. It is different from the formal system in not being (i) school-centred, (ii) hierarchically structured, (iii) depending exclusively on the full-time teacher, and (iv) a single-entry system from which people drop out but to which lateral entry is more or less out of the question. It is also significantly different from informal or incidental education in not being unorganized and unsystematic. Nonformal education has come to be understood as an organized educational activity which is systematically pursued and is outside the framework of the established formal system.

The Central Advisory Board of Education in its November 1975 meeting asked that

the exclusive emphasis on formal system of education should be given up and a large element of nonformal education should be introduced within the system.

The Board has now appointed a Committee on Nonformal Education. On the basis of the recommendations of this Committee, the Standing Committee of the Board adopted a detailed resolution on nonformal education, emphasizing

that nonformal education is an effective way of learning for all categories of young and adult learners in search of useful skills and knowledge and that, while it does not underestimate the importance of literacy, it should be viewed as a functional programme organized in the spoken language that enables an individual to grow to his best potential and to get ready for an active role in solving problems in his working and living environments. It emphasizes learning rather than teaching, an emerging rather than a prescribed curriculum, and an elastic and dynamic programme which provides adequate learning opportunities to all individuals throughout their lives.

The present thinking on nonformal education is based on a few assumptions, including: (a) that illiteracy is a serious impediment to an individual's growth and to the country's socio-economic progress; (b) that education is not coterminous with schooling but takes place in most work and life situations; (c) that learning, working, and living are inseparable and each acquires a meaning only when correlated with the others; (d) that the means by which people are involved in the process of development are at least as important as the ends; and (e) that the illiterate and the poor, although often governed by blind adherence to traditions and accustomed to accepting their state of subjugation, nevertheless can rise to their own liberation through literacy, dialogue, and action.

The concept of nonformal education is now beginning to be understood in several of its aspects, such as:

Flexibility in regard to the time, place, qualifications of the learners and instructional arrangements.

Relevance of the curriculum to the needs of the learners and to the concerns of the environment and the country.

Diversification in learning materials and methods, although not underestimating the importance of literacy, importance of dialogue as a means of rising to higher levels of consciousness is being realized.

Action and work orientation, implying that education makes sense only to the extent that it affects attitudes and leads to organized action.

Nonformal Education and Development

EDUCATIONAL EFFORTS IN GENERAL, more particularly adult education and literacy programmes, have to be viewed in the perspective of the almost universally acknowledged fact that the developmental objectives cannot be fully achieved without education and that education in turn is influenced by developmental processes. It is important that the very concept of development is thought afresh. There is now a substantial consensus about the shortfalls, deficiencies and contradictions in the dominant development strategies. Particularly important is the conclusion that the technocratic and qualitative approach to development, with major emphasis on growth and on the creation of wealth accompanied by the assumption that it would automatically permeate from the higher to the lower strata, has proved wrong. Creation of wealth without deliberate and persistent efforts for its fair distribution, growth without measures for decreasing inequalities, increased food production without care for the needs of the poorest sections, industrialization without enlargement of employment opportunities, modernization without giving priority to human considerations – these are not the ways which could lead to balanced social and economic development. The Planning Commission, in defining the Approach to the Fifth Five Year Plan, observed that “the twin causes of poverty are underdevelopment and inequality. It is not advisable to ignore or underplay either factor.” This awareness is very important from the educational standpoint. The old strategy of development coincided well with a formalized, rigid, and elitist educational system; the new approach to development needs preparation of rural and urban masses, their inclusion into the communication circuit, widening their literacy abilities, and diversified learning facilities for them.

A beginning in this direction was made when the Farmers Training and Functional Literacy Project was launched in 1968-69. That programme visualised coordination of the activities of the Ministries of Education, Agriculture, and Information & Broadcasting to upgrade the information and skills of the farmers so that the opportunity provided by the high-yielding varieties of seeds may be opened even to the poor and illiterate farmers. In the recent years

education, organized in a nonformal and flexible manner, has become a part of family planning programmes, Integrated Child Development Services, and a variety of other women welfare and rural development schemes.

A National Programme

EFFORTS MADE IN THE POST-INDEPENDENCE PERIOD have been excessively selective and based on a peculiar fixation in favour of pilot programmes. The Gram Shikshan Mohim in Maharashtra was a significant exception to this. In the recent past, the Ministry of Education and Social Welfare, as well as most State governments, have launched a national programme of nonformal education for the age-group 15-25. This programme has already been extended in 1977-78 to nearly one hundred districts. In addition, the Farmers Functional Literacy Project has been extended to approximately 150 districts and its coverage enlarged to include Tribal Development districts, Drought Prone districts, Small Farmers Development Programme, etc. The Nehru Yuvak Kendras, which are the focal point for the organization of nonformal education programmes among the non-student youth, now cover approximately 135 districts. The Kendras organize diversified nonformal education programmes including vocational training, functional literacy, and cultural and recreational programmes through a network of youth clubs and mahila mandals. In the area of workers' education too a national programme is being drawn up to provide for learning opportunities to the workers and their families. The voluntary agencies have always played an important role in programmes of adult and nonformal education. Some agencies such as the Karnataka Adult Education Council, Gujarat Social Education Committee, and Bombay City Social Education Committee have had large programmes extending to the whole State or a metropolitan city. In recent years some organizations have taken the responsibility to give leadership in areas of curriculum development, production of learning and teaching materials, training, evaluation, etc. Besides, the universities have shown readiness to enlarge their activities and to take their services closer to the community by the organization of a variety of continuing and adult education programmes. Research laboratories, institutions of scientific and agricultural research, and Institutes of Management have begun to take more and more interest in programmes of nonformal education and rural development.

Gradually, although rather slowly, the banks and other industrial and commercial establishments are beginning to evince interest in this area.

Since nonformal education envisages identification of learners' and environmental needs and development of curricula and learning materials on that basis, specialized capability for doing these things have to be established at the national, State, and district levels. At the national level, this responsibility is so far being discharged mainly by the Directorate of Nonformal Education which is working on methodologies of curriculum development, training, and evaluation. An effort is being made to develop a National Resource Group by involving other governmental and semi-governmental agencies as well as universities and voluntary organizations. Development of similar capability is being attempted at the State level through the establishment of State Resource Centres in important State level voluntary agencies.

The Unresolved Issues

CONCEPTUALLY, NONFORMAL EDUCATION is more relevant to the needs of the country as well as to those of the learners. The strength of this emerging alternative is that it does not make its beneficiaries unemployable by alienating them from their ancestral occupation as formal education does. Also, it has the possibility of developing a level of consciousness among the learners which can help them resist the oppressiveness of the existing class and caste structures. In other words, at least theoretically, nonformal education has become a vehicle of radical social transformation.

On the other hand, the fate of nonformal education is already being compared with that of Gandhian basic education, which was pushed out of the educational system even while everyone praised its conceptual excellence. The basic weakness of the system of nonformal education is that owing to its low level of scholastic and linguistic achievement it does not have a built-in possibility for vertical mobility. In our country, therefore, nonformal education is likely to be viewed not so much as an alternative system of education, but rather the only way in which the existing deficiencies of our educational system can be countered. Moreover, without very careful planning even this possibility may remain a theoretical outline, to be pushed out of the scene by the Brahmanical system of education. What, then, are the issues on which attention must be concentrated if nonformal

education is to become a viable strategy for our future?

Nonformal education can loosen the hold of the Brahmanical system of education if the quantitative as well as the qualitative aspects of this potentially alternative system are clearly visualized.

Quantitative Projections

WHILE OUR PRESENT SYSTEM OF EDUCATION has marginalized vast masses of people, the nonformal system must reverse the optic and involve these masses in the educational process. According to the 1971 Census, 211.7 million or 33.32 per cent of the population above 14 years is illiterate. The percentage and numbers in the 15-35 age-group were 41.27 per cent and 98.2 million. Assuming that the number of illiterate persons in the latter age-group would be approximately 100 million at present, we must attempt to provide a massive programme of nonformal education for this vast segment of the population within the next ten years. There have been various calculations of the expenditure involved on providing appropriate nonformal education to one person. The Directorate of Nonformal Education of the Ministry of Education has calculated the per learner cost at Rs 50. The financial requirement for organizing a programme for 100 million persons would thus come to Rs 5,000 million over a period of ten years. This is not beyond the capacity of our country if there is a political will to attend to this problem.

The Methodological Issues

WE SHOULD NOT COMMIT THE ERROR of confusing the objectives of formal and nonformal education. It is true that while formal education emphasizes scholastic achievement, the stress in nonformal education is on correlation between learning, living, and working. The implication of this is that the curriculum for nonformal education must be related to the needs of the learner and it should also be linked with the developmental imperatives. Group and individual action should be both a method and a result of learning. This raises some very difficult questions of linkages.

1. By an ingenious combination of survey, interviews and involvement of knowledgeable people it might be possible to identify the needs of the learner and the environment. Its linkage with the curriculum is, however, a very difficult exercise which requires a high degree of professional training and experience. Besides, the curriculum can reflect the needs of the learners and the environment only if the

learners are themselves involved in desinging the curriculum. There is very little experience in our country for this kind of involvement. Devolution of resources and authority is a slow process; and there are inherent difficulties if the main agency for the implementation of nonformal education programme is the government.

2. The strategy of linking the curriculum with the developmental needs must attempt to create a spirit of self-reliance rather than dependence on government. Whether it be agriculture, village industries, health care, or education itself, the emphasis has to be on the development of capability among the people to take care of themselves, by community participation and building up of village and *mohalla* institutions. This is an inversion of the traditional role of the state and there is a poetic irony in using governmental machinery to train in self-reliance, particularly with reference to dependence on government.

3. Without question, literacy has to be an indispensable part of any programme of nonformal education for the illiterate masses. The establishment of a linkage between the diversified and need-based curriculum on the one hand, and the learning of literacy and numeracy skills, on the other, is again something in which we have very limited experience. Most of the programmes of nonformal education have tended to become mere literacy classes, which takes away from the whole programme its essential motivation. The latter can be provided only if literacy is integrated with a learning system aimed at problem-solving by creating an awareness regarding issues and problems not otherwise realized.

4. The organization of a massive programme of nonformal education will require the preparation of suitable learning and teaching materials in the spoken language of the learners. Here again the experience is exceedingly limited. The difficulties are made more acute because the learners may themselves feel that this is a way to keep them backward. Moreover, the technique of building bridges between the spoken dialect and the regional language has not been tried out on any appreciable scale.

5. Numerous traditional and folk forms have been instruments of incidental learning over the centuries. A good programme of nonformal education must endeavour to systematize these traditional and folk forms and make them serve the learning needs of the people who have long been familiar with this medium. However, though these forms are flexible and locally understood, it will require a great deal of

ingenuity and involvement of truly gifted people to transform them into systematic learning units. Many of these traditional and folk forms are obscurantist and foster superstition and other social evils; therefore, an attempt will have to be made to utilize this medium while rejecting its traditional content.

6. The process of nonformal education must be correlated with work and with individual as well as group action. This correlation is always an exceedingly difficult exercise. Yet, it must be remembered that mere learning without accompanying action is fruitless and isolated action not preceded by thought is empty activism. This correlation between work and action on the one hand and learning on the other is the touchstone to test the usefulness or otherwise of a programme of nonformal education.

Implementation Agency

THE PROBLEM OF IMPLEMENTATION of nonformal education is, in many ways, not different from the general problem of development. From this point of view the critical region comprises West Bengal, Orissa, Bihar, and Uttar Pradesh and to a lesser degree Rajasthan, Madhya Pradesh, Assam, and Jammu & Kashmir. In this area the formal system of education has been less effective and the progress of development has been slow. Things are made more difficult because this area is also institutionally poor. The general level of the institutions of formal education is low and the number and coverage of voluntary organizations is extremely limited. For this reason the developmental programmes, including nonformal education, have to depend excessively on the government. Here is a real management problem. Government has attempted a variety of administrative and management improvisations, such as community development, panchayati raj, district corporations, district development agencies, etc., and yet we do not seem any closer to the solution.

There is a basic contradiction in nonformal education programmes being managed primarily by the government. Such programmes presuppose flexibility, ingenious improvisations, efficient handling, and responsiveness to the needs of the learners, characteristics generally wanting in the field level government functionaries. There is also a contradiction, theoretically speaking, in an attempt to prepare the people to resist oppression and to implement this programme through the government. Similarly it would be a very unusual government machinery which would train people in self-reliance. From the

practical point of view, a programme of nonformal education would require the creation of professional groups with expertise in things such as survey, preparation of curriculum and learning materials, programme evaluation, etc. In the government system, which seldom gives importance to the development of expertise and which is seldom able to ensure appropriate placements, it is difficult to expect the creation of professional groups of the kind visualized.

Who Shall "Teach"?

WHILE WE MUST CONTINUE to explore various management alternatives for the implementation of a national programme of nonformal education, the identification of suitable persons to take responsibility for this work at the village or classroom level will enable us to overcome many limitations. There has been much discussion about what the person who is entrusted with the responsibility of actually conducting the nonformal education programme for the learners should be called. Such a person is traditionally called the teacher. It is, however, argued that this is unsatisfactory because of the pedagogic association with it and because the authority of the teacher tends to get identified with the authority of knowledge and also because such an arrangement supposedly treats the learners as subjects to be manipulated according to the convenience and preference of the teacher. Several other alternative nomenclatures have been suggested, such as instructor, facilitator, centre-organizer, and animateur. Any of these names can be satisfactory provided that his role is properly appreciated. My own preference is in favour of "teacher", because of its usage and also because teaching means, among other things, to educate.

A really good teacher of nonformal education can overcome almost every handicap. He should be able to motivate the learners; normally he would know the needs of the learners and should be able to prepare a curriculum to suit those needs; he could manage with a minimum of teaching aids by improvisation in the local area; he ought to be able to link an action programme with the learning programme through the organization of youth clubs, mahila mandals, charcha mandals, etc. A good teacher is a substitute for almost every limitation, but there is no substitute for a good teacher. Therefore, the question as to who shall teach is really a central question and one to which there cannot be a definitive answer.

Many teachers in village schools have earned the trust of the people

and are familiar with the essentials of the educational process and therefore have an advantage. However, their familiarity with the educational process is generally restricted to classroom-centred bookish education and they seldom have familiarity with the areas which are relevant for the functional needs of the learners. Left exclusively in the hands of the teachers of village schools, nonformal education would not escape the ills of formal education. Generally speaking, the teachers work on, and for, a stipend and measure their responsibility for nonformal education by the proportion of that stipend to their basic salary.

Two other categories of personnel are often mentioned as possible supplements to the village school teachers: the village-level extension functionaries and students. Willing involvement of field-level functionaries, e.g. the village-level workers, primary health workers, and the extension staff of agriculture, animal husbandry, irrigation, forestry, etc., can provide a valuable input in the instructional arrangements. This is, however, possible only if the concerned departments of the State government are convinced of the worth of nonformal education as a support to their own activities. Although efforts have been made in the past to secure this kind of involvement, the success has been rather limited. Owing to their idealism, unbounded energy, and capacity for selfless service, students can play an important role as teachers in the nonformal education programmes. Past experience has, however, been that a programme manned mainly by students lacks continuity and the students do not persevere till the conclusion of a programme. The involvement of students in nonformal education can be effective if they can be motivated to continue with this work till they have concluded the programme for one batch. This may necessitate a review of the points for which they get credit in their certificates, rearrangement of vacations, etc. It would also have to be ensured that the teachers also participate in the programme.

Implementation Strategy

IN THE DECLARATION made at the World Conference on Literacy at Perspolis, 1975, it was stated that success in a programme of literacy linked to man's fundamental requirements, ranging from his immediate vital needs to effective participation in social change was closely connected with national political will. It is only if the political leadership resolves to accord to nonformal education a status equal to

formal education that this system, which provides a hope and opportunity not only to the poor and the deprived sections of society but for the formal educational system itself, will come into its own. One of the obvious ways in which people judge political commitment is by the size of financial allocations made and its proportion to the total budgetary outlays for education. While the requirement of funds for the formal system of education and research will continue to be high, there shall have to be a reasonable assurance regarding adequacy of funds for the programmes of nonformal and out-of-school education.

The political will must also manifest itself in revamping the administrative structures having a bearing on nonformal education in a manner that it implements the programme with faithfulness, flexibility, and ingeniousness. The highest importance shall have to be given to support the existing voluntary agencies. Apart from the existing voluntary organizations working in the field of nonformal education, voluntary organizations connected with khadi and village industries, Sarvodaya and socio-religious organizations can be persuaded to build into their programmes a component of nonformal education. Students and youth, either forming their own groups or under the leadership of some spirited teachers, can be mobilized. What we have to aim at is a mutually corrective alliance of government, youth, and voluntary organizations.

The most significant aspect of the implementation strategy relates to the identification and preparation of suitable teachers for the programme. For the rural areas it is fundamental that the teacher should be a local person and not one delegated from the urban milieu. Although during the transitory period there may be no alternative to trying out with the village teacher and the extension functionaries, ultimately the responsibility for nonformal education shall have to be taken over by the village youth. There are many reasons to justify such a contention: (a) they would have greater acceptability among the rural people; (b) their knowledge of the local area and of the local temper does away with the need for the so-called rural orientation; (c) their language and expressions being the same as those of the learners, communication would be easy to establish; (d) they could follow up the programme without any artificial effort; (e) they would be available for advice and consultation even after the nonformal education programme has concluded; and (f) this would create authentic local leadership of well-trained youth. It has, however, to be

accepted that such an effort may involve the organization of long-term training and educational programmes and very substantial investment. Such an investment in time and money would, however, be fully justified in the long run. If such a strategy is adopted, it should be possible to give high priority to the selection of a large number of girls drawn from the rural areas for upgrading their educational level and training to enable them to function as teachers in nonformal education programmes and as leaders in their community. Similarly, efforts will have to be made to identify, as far as possible, persons belonging to the weaker sections of society to play this leadership role. It is these youth, men and women, drawn from amongst the tribals and the other weaker sections of society who may ultimately be able to give to nonformal education the kind of content and meaning which its concept envisions.

A. R. Dawood

Secondary Education

Problems and Prospects

THE EDUCATIONAL SYSTEM IN INDIA has been the target of public criticism in the past. Since the introduction of the 10 + 2 + 3 pattern of education in many of the States in recent years, this criticism has become more vocal and widespread. School teachers, particularly in the senior class, are upset because they are now required to take orientation courses in their special subjects which they thought they had been teaching very successfully for so many years. Students are confused, if not confounded, by the wide range and complexity of the crowded curriculum. Parents and guardians, with nostalgic memories of their own school days, often complain about the mess that has been made in education by the "educational experts". A one-day meeting of educationists and educational administrators was convened in New Delhi some months ago by the new Union Minister of Education to consider some of the major problems that had arisen in connection with the implementation of the 10 + 2 + 3 pattern. This provoked further caustic comment in the press. "Confusion Plus" was the title of one editorial in a leading daily which reviewed the proceedings of the meeting. The heading aptly summed up the public reaction. A single day's review by educationists, however distinguished they may be, of problems that have been discussed almost threadbare during the past few years, could only add to the prevailing confusion. In any case, it did not help to relieve parents, teachers, and students of their acute anxieties regarding the new educational developments.

Origin of the 10+2+3 Pattern

HOWEVER, WHAT MOST PARENTS DO NOT KNOW and what even some

seasoned teachers appear to have forgotten is the fact that the 10 + 2 + 3 pattern is not a new educational model. It is an old scheme for the reorganization of the educational system in India, proposed from time to time during the past 50 to 60 years. In order to understand the important problems of secondary education today, it is necessary to consider briefly some serious efforts made in the past for such educational reorganization. As far back as 1919, the Calcutta University Commission pointed out that the dividing line between the university and secondary school should properly be drawn at the Intermediate examination, which was held after twelve years of education, and that the duration of the undergraduate course for the first degree should be increased from two to three years. This may be regarded as the genesis of the 12 + 3 pattern (now broken up into 10 + 2 + 3) leading to the first degree. About three decades later, the University Education Commission (1948-49), presided over by Dr S. Radhakrishnan, recommended a 10 + 2 + 3 common pattern of school and college classes for the whole country. The Commission was of the view (a) that by extending the period of the secondary stage, it would be possible to provide vocational education and thus reduce pressures on university admissions; and (b) that the lengthening of the first degree course to three years, which would be preceded by a two-year period of intensive preparation, would lead to a considerable improvement in the standards of higher education. These expectations, however, were not realized, as no steps could be taken to implement the Commission's recommendations.

Mudaliar Commission's Recommendations

WITHIN THREE YEARS of the publication of the Radhakrishnan Commission's report, the Government of India set up the Secondary Education Commission (1952) under the chairmanship of Dr A.L. Mudaliar to inquire into the problems of education at the secondary stage. Naturally, the question of the educational pattern came up once again for consideration. It is a curious fact in the history of Indian education that while the recommendations of the prestigious Radhakrishnan Commission regarding the educational structure were more or less put in cold storage, the proposals of the Mudaliar Commission on the same subject received official recognition and support within a short period. It is the Secondary Education Commission which was responsible for the concept of the eleven-year higher secondary school, for the acceptance of the 8 + 3 + 3 pattern

of education, and indirectly for the institution of the one-year pre-university course in the colleges. The haphazard implementation of the Secondary Education Commission's proposals has left a trail of problems behind, and some of these problems have bedevilled the reform and reorganization of secondary education up to this time.

In considering the problems of education at the secondary stage, it is necessary to point out that while the new pattern of 10 + 2 + 3 for school and college classes recommended by the Education Commission is an educational reform of great significance, we must keep in mind the substance of the reform and not the arithmetic of the structure. The structure, according to the Commission, is merely the skeleton of the educational system and is of the least importance. What is more important is the duration or total period covered by the different stages, the extent and quality of essential inputs such as teachers, curricular methods of teaching and evaluation, and the proper utilization of available facilities. The secondary stage has become the weakest link in the educational chain, because its duration is short, the education it provides during this short period is largely of the academic type, which does not promote vocationalization, and the methods of teaching and evaluation are still governed by the old tradition. It is clear that no organizational changes in the structure can bring about any appreciable improvement in secondary education without transformation in its objectives, curriculum, and methods of teaching and evaluation and a radical change in the outlook of parents and students.

Education Commission's Proposals and National Policy

AN ATTEMPT IS MADE in the following paragraphs to discuss some of the pressing problems of secondary education to be found all over the country today with some reference to the special problem in Maharashtra. The first issue that has arisen in connection with the implementation of the 10 + 2 + 3 pattern concerns the type of institution – school or college – in which the higher secondary classes should be located. The Kothari Commission was quite clear on this point. It attached great significance to the location, *exclusively* in the schools, of all the courses that formed part of the higher secondary education. In the initial stages, according to the Commission, the bigger and better type of high schools would be upgraded and provided twelve years of schooling, and all pre-university and intermediate classes should be transferred as soon as possible to the

upgraded schools. However, on account of the vastness of the country and the variety of its educational patterns, the Commission agreed that the proposed reorganization should be carried out through a phased programme spread over twenty years.

The statement on the National Policy on Education, issued in 1968 by the Ministry of Education, Government of India, while accepting the proposal about the 10 + 2 + 3 pattern deviated from the Commission's vital recommendation regarding its location. The National Policy laid down that while the ultimate objective should be the adoption of the 10 + 2 + 3 pattern, the higher secondary stage of two years could be located either in schools or in colleges or in both the institutions, according to local conditions. This modification of the original proposal was dictated probably by the harsh realities of the existing situation. As is well known, most secondary schools do not have the necessary accommodation, the highly qualified staff, the large libraries, and the well-equipped laboratories required to make suitable provision for imparting higher secondary education. Substantial resources will be required to convert even a limited number of good high schools into higher secondary schools. There will be a tremendous wastage if facilities already existing in colleges are duplicated in the schools. Such considerations might have weighed with the policy-makers in modifying the original scheme. However, as often happens in the field of education, we are inclined to be conservative and over-cautious in introducing a reform with the result that we change the previous pattern in such a way that it does not differ basically from the dear old scheme. As the French say, "*Plus ça change, plus c'est la même chose*" (the more it changes, the more it is the same). Consider the nomenclature that is used to describe the +2 stage of the new educational pattern. It is called a Higher Secondary Course, when the reorganization is in a school, an Intermediate Course as before in Uttar Pradesh, a Pre-University Course, as in the past, in Kerala and a Junior College Course in Andhra Pradesh, Maharashtra and other parts of the country. We have even been told that Kerala, which has been providing for over a decade a 10 + 2 + 3 scheme of traditional education leading to the first degree, had actually implemented the Kothari Commission's pattern even before the Commission submitted its report!

In all this anxiety to present a rosy picture of uniformity against the background of so many diverse patterns, we are apt to forget that the

crux of the problem at the higher secondary stage is to make it terminal for a large number of boys and girls completing secondary education. The provision of a variety of vocational courses at this stage so as to divert the students into different walks of life still remains by and large a distant dream. With the +2 stage being located in colleges as well as in schools, the higher secondary courses will be regarded as college-preparatory, and the pressures on university admission are not likely to be reduced to any appreciable extent. There is another grave danger in this dual system. Given a choice between school and college for pursuing what in Maharashtra is called the Junior College Course, the school-leaver will generally opt for the college. In fact, the somewhat lax discipline and false glamour associated with college education are likely to wean a large number of good students away from the upgraded schools. We heard the other day two girls between the age of 15 and 16 years, who had just succeeded in securing admission to the first year course of a reputed college in Bombay, talking very excitedly about FYJC (First Year Junior College) and SYJC (Second Year Junior College) as if these were degrees in higher education which they were going to obtain. What a sad outcome of the recommendations of the Kothari Commission! As Robert Burns has said, the best-laid schemes of mice and men often gang aft agley.

Overloaded Curriculum

A FREQUENT COMPLAINT made by parents and teachers about the new pattern is in connection with the overloading of the school curriculum. There is some justification for this criticism. The new curriculum appears to be heavy, partly because of the increase in the number of compulsory subjects during the ten-year school stage, and partly because of the inclusion in some areas of study, particularly at the higher secondary level, of new, advanced and sometimes abstruse subject-matter. The perplexed parent cannot understand, for instance, why three languages, science, and mathematics should all be made compulsory in school, and why a new-fangled activity called work experience should be added to increase the burden. Things were different in the good old days when he himself was a student! The harassed senior teacher, who has had little time and even less motivation for keeping himself abreast of the recent developments even in his own special field, is now overwhelmed by the range and complexity of the topics he is expected to cover. He has to do his own home work at night in order to be up to the mark before his class

during the day. Some of us may have read about a physical education teacher, who was suddenly asked to switch over to the teaching of physiology and hygiene, and who carried on his new assignment successfully by being *one* bone ahead of his class. It would not be surprising if we hear sometimes of teachers, entrusted with physics or chemistry in the new higher secondary classes, who are only one topic ahead of their students!

It is clear that the new curriculum, whatever be its merits, will not have a qualitative impact on secondary education unless a massive programme is undertaken for the reorientation of school teachers. For bringing about such a change, it is not enough to have the traditional refresher courses, weekend seminars and workshops and other similar short-term programmes. Knowledge advances at such a tremendous speed that, with regard to both subject-matter and methodology, even trained teachers become out of date within a few years of their training. Reorientation has to be a continuing process. The National Council of Educational Research and Training, the State Institutes of Education and the Secondary Training Colleges have a great part to play in this continuing retraining of teachers.

Vocational Education

THE CRUCIAL STAGE IN THE NEW PATTERN of education is the +2 period where diversification of courses is to take place after the completion of 10 years of general school education without any specialization. The Education Commission had visualized that at the end of the primary stage of 7 to 8 years about 40 per cent of the students would leave school either to enter working life or to take up some suitable vocational course. The remaining 60 per cent were expected to complete the 10 years of schooling after which half the number would continue further in the stream of general education and the other half would enter working life or take up vocational courses of one to three years. All these calculations have been proved wrong. There was some expansion of vocational programmes at the secondary stage during the past ten to fifteen years. But the facilities for general secondary education in the same period have expanded to such an extent that the vast majority of boys and girls have pursued their studies after the school stage in academic institutions. The result is that the enrolment in vocational courses today is about 9 to 10 per cent of the total enrolment at the secondary stage. This tendency continues at the post-high school level. It has been pointed out that in

Maharashtra in June 1974 only 13.5 per cent of the successful SSC students opted for vocational education, and that in June 1975 the percentage of such students declined to 12. If this is the state of affairs in a progressive State, where vocational guidance is being provided on a fairly large scale, one can easily understand the slow development of vocational courses in other parts of the country. Mr J.P. Naik in his book *Policy and Performance in Indian Education (1947-74)* has ascribed the failure of vocationalization to (a) the unfavourable wage policies for middle-level skilled workers as against white-collar job operators; (b) the failure to control the expansion of general secondary education; and (c) the inability to create adequate job opportunities. The prospects for the expansion of vocational education, therefore, depend not merely on a reorganization of the educational system but a radical reorientation of our national economic policies.

Problem of Surplus Teachers

THE PROBLEM OF TEACHERS who have become surplus either in school or in college as a result of the implementation of the new pattern is an unfortunate development which has agitated the educational profession in the country. Education departments and universities are inclined to take a somewhat cold and detached view of this problem. In Greater Bombay, for instance, the procedure followed in the case of surplus secondary school teachers is typically official. A departmental list of such teachers has been prepared, and aided secondary schools having vacancies on their staff are expected to fill them up by selecting candidates for the required subjects from the official list. There is hardly any freedom of choice in some areas of study. Consequently, hasty allotments are sometimes made, leading either to the maladjustment of the teacher or the dissatisfaction of the school. In one State, where the high schools are now being upgraded and the surplus lecturers of the colleges have been transferred to the higher secondary classes of the schools, a peculiar problem has arisen. It is reported that the lecturers who have been transferred are paid the higher UGC scales of salaries, while the senior teachers with the same qualifications teaching in the higher secondary classes are on the lower departmental scales. Evidently, there are more problems in schools and colleges today than the Kothari Commission's philosophy dreamt of! But the problem of surplus teachers is essentially a human problem and should be approached with tact, understanding, and a certain degree of compassion. The retrenchment of a dedicated

teacher who has spent several years of his life in the field of education is a terrible blow, and even his transfer from an institution to which he has been closely attached to another where the atmosphere may not be congenial, need not be based on the matter-of-fact procedure according to which an official file is transferred from one department to another.

Financial Resources

HOWEVER, FROM THE POINT OF VIEW of the administrator, all the problems that have arisen in connection with the implementation of the Commission's recommendation are comparatively of less importance than the one overriding problem – the inadequacy of financial resources to meet the demands of education. Education has always had a low priority among competing demands for financial allocations. As everybody knows, whenever any cut in the estimated expenditure provided in any annual budget is to be proposed, the allocation for the education department is generally the first to be "axed". The financial allocation for education in the Fourth Plan was four per cent of the total plan outlay. It has been reduced to two per cent in the Fifth Plan. Hence the freedom given to the States to slow down the pace of the proposed reorganization in school and college education. Hence also the proposal now made for the option to be given for a 14-year course for a pass degree as against the Commission's definite recommendation that the duration of the course leading to the first degree should not be less than 15 years. This is a compromise dictated, of course, by financial considerations. John Morley in his comparatively unknown book, *Compromise*, has said that it makes all the difference in the world whether you put truth in the first place or in the second place. But Morley was writing about truth, while we are dealing with a practical subject like education. The history of education in India is full of compromises, and one more compromise, even though it concerns a vital educational reform first recommended more than half a century ago, will not create any violent storm of protest in the educational world.

Vina Mazumdar

Education for Equality

IN HIS CONVOCATION ADDRESS¹ to the Poona University, delivered on 27 March 1977, Mr J.P. Naik described the three package deals introduced by the framers of our Constitution to create "a society based on freedom, equality, justice and dignity of the individual". The first package contained adult franchise, equality for women, and special protection for the scheduled castes and scheduled tribes – "*for a better redistribution of political power*"; the second – universal free and compulsory education up to the age of 14 – was meant to "*secure a better redistribution of knowledge*"; the third – provision of minimum living standards for all and prevention of concentration of economic power in the hands of a few persons or groups – "*to achieve a better redistribution of economic power*". Mr Naik's entire life bears testimony to his fundamental belief that the second package is crucial for the success of the other two. As an ardent advocate of equality and universal education, he has worked untiringly to obtain greater support for the education of women and other socially underprivileged groups, lashing out in anger and pain at the "declining zeal" and increasing vested interests of the elite classes which have prevented the realization of these goals.

The story of women's education best reveals this failure and the contradictions that have come to characterize Indian education today. On the one hand, we have achieved fantastic progress in higher education, with women constituting nearly 25 per cent of the university population, a record envied by women in many developed countries. On the other, women account for the largest group among illiterates. Between 1951 and 1971, the total number of illiterate

¹ Published in *New Quest* 3 (September 1977)

women increased from 161.9 million to 215.3 million. Nor can this increase be explained away by the increase in population, since we claim that in the same year (1971) 69 per cent of girls in the 6-11 age-group were enrolled in schools. Data on the enrolment of girls at different levels of the school system portray a steadily rising coverage. The large majority of illiterate women are in the older group, as the following figures will indicate:

Age-group	Per cent of illiterate women	Number of illiterate women	
		Urban areas	Rural areas
15-24	67	36 lakhs	262 lakhs
25+	88.6	129 lakhs	816 lakhs

Source: *Report of the Committee on the Status of Women in India*. Computed from the Census of 1971.

Illiteracy is concentrated not only in certain age-groups, but also in some regions, communities and classes. Female literacy rate varies from 53.9 per cent in Kerala to 8.26 per cent in Rajasthan. The Committee on the Status of Women in India identified the States of Rajasthan, Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, and Andhra Pradesh as the most backward in the development of women's education. Even within the States, there is gross disparity among different districts. Thus female literacy ranges from 33.85 per cent (Dehra Dun) to 4.85 per cent (Basti) in Uttar Pradesh, 31.42 per cent (Indore) to 4.09 per cent (Bastar) in Madhya Pradesh, and 29.57 per cent (Hyderabad) to 6.48 per cent (Adilabad) in Andhra Pradesh. Illiteracy and lack of formal education continue to be very high among scheduled caste, tribal, and Muslim women. The Committee on the Status of Women in India pleaded that plans for educational development which did not include special priority measures to remove these imbalances "will contribute to the increase in inequalities".

Education-watchers all over the world are beginning to admit that instead of being the "great leveller", the development of education, at least in Third World countries, has introduced a new factor of inequality. This is particularly evident in the case of women. The gap in status, life-styles, aspirations and communication between the educated and the uneducated women is far greater than the earlier one

dictated by caste, religion, and other cultural factors.

Even among the educated there are sharp divisions determined by generation, class, and training. The difference between the "mods" and the *bahenjies* may be more pronounced in the metropolitan cities, but they indicate a trend which is fast spreading to other centres, and whose influence should not be underrated. Nor should these groups be identified with the earlier assumed divisions between the "emancipated" and "traditional" women.

EMANCIPATION OR LIBERATION can be interpreted in many ways. The leaders of the movement for women's equality during the twenties and the thirties of this century differed radically from the earlier social reformers in their view of the goals of social development. The earlier reformers had seen education as an instrument to improve woman's efficiency to perform her familial roles as wife and mother. Their vision of the future did not extend to equality or women's right to perform any other roles in society. Their intention was, in effect, to strengthen the existing social structure and the hold of tradition through the family as the basic social unit. Urbanization, modernization of the economy, and westernization through the "English" system of education, in their view, were creating communication and knowledge gaps between men and women, and thereby eroding the authority of the family. Women's education was advocated to arrest this process. Greater efficiency in her familial roles would enhance women's status within the family. Since women's attachment to tradition was believed to be stronger than that of men, enhanced dignity and authority of women within the family would strengthen the hold of tradition in society.²

The leaders of the women's movement, on the other hand, emphasized equality between the sexes as a basic principle on which the reconstruction of Indian society was to take place. They were not out to perpetuate or strengthen the existing social order. Their inspiration came not from the defenders of the Indian social structure, but from the rebels – Jyotiba Phule and "Lokhitwadi" Gopal Hari Deshmukh, who saw the subjugation of women as an instrument to

² For a more elaborate and documented statement of this view, see the author's paper "The Social Reform Movement – from Ranade to Nehru" in *Indian Women – from Purdah to Modernity*, New Delhi, Vikas, 1976; and *Towards Equality – Report of the Committee on the Status of Women in India*, Government of India, Department of Social Welfare, 1974.

perpetuate Brahmanical or caste dominance; from the revolutionaries, who accepted women into their ranks as equally committed to the cause of freedom from alien rule; and, above all, from Mahatma Gandhi, who believed that the social revolution of his dream would be impossible without equal rights and responsibilities for women. Ideas which proclaimed woman to be inferior, less capable or more evil than man, fit only to be his plaything, were in his view only "man's interested teaching", the product of "his greed for power and fame".

Woman is the companion of man gifted with equal mental capacities. She has the right to participate in the minutest details of the activities of man, and she has the same right of freedom and liberty as he. . . . By sheer force of a vicious custom, even the most ignorant and worthless men have been enjoying a superiority over women which they do not deserve and ought not to have.³

Inspired by such ideas, the women's movement saw emancipation as not merely a release from oppressive customs that reduced women's position within the family (as the reformers had viewed it), but as equality of opportunity, responsibility, and autonomy to choose one's role, to participate in all aspects of social life, particularly in the struggle for freedom and national reconstruction. Education had to be an instrument for these wider responsibilities and roles, and no longer the limited tool for manufacturing better mothers and wives.

This view has been persistently advocated by women leaders in India from the representation of university women to the Sadler Commission (1918) to the National Committee on Women's Education (1959) and the Committee on (against?) Differentiation of Curricula for Boys and Girls (1964). It has also been endorsed by many expert bodies after independence such as the First Five Year Plan (1951), the Secondary Education Commission (1953), and the Education Commission (1966).⁴

In spite of such reiteration, it is amazing to see how the older, reformist view continues to influence policies towards women's education. The Radhakrishnan Commission on University Education (1948) might be excused for overlooking all non-familial dimensions of women's lives because of its date, but no such excuse can be offered

3 M.K. Gandhi, *Young India*, 26 February 1918.

4 It should be recalled that Mr Naik served as a member of the National Committee on Women's Education, and as Member-Secretary, Education Commission, he endorsed the recommendations of the Committee on Differentiation of Curricula.

for the NCERT, whose draft Approach Paper to the Ten Year School Curriculum,⁵ issued in 1975, reads like a throwback to the nineteenth century. The imprint of this attitude is visible in the persistent differentiation of curricula, with home science, drawing, painting, music, etc., open only to girls as alternatives to compulsory mathematics for boys, and in the lack of options for good basic training in mathematics or the sciences in many institutions that cater only to girl students. Even now in the pattern of "work experience" introduced for girls in most schools, including co-educational ones, the differentiation continues to be maintained.

The United Nations' World Plan of Action for the International Women's Decade admits this kind of discrimination as widely prevalent in the educational systems of most countries:

Girls' choice of areas of study are dominated by conventional attitudes, concepts and notions concerning the respective areas of men and women in society.

The inequality of sexes which begins with differences in the socialization practices for boys and girls, instead of being combated by the educational system is strengthened by the latter through such biases in curricula, training, and attitudes of teachers and general educational policies. Analysis of textbooks reveals the operation of this bias in the images, roles, and values projected for and about women. Commenting on the failure of the educational system to promote the development of needed new values, the Committee on the Status of Women in India observed:

If education is to promote equality for women, it must make a deliberate, planned and sustained effort, so that the new value of equality of sexes can replace the traditional value system of inequality. The educational system today has not even attempted to undertake this responsibility. In fact, the schools reflect and strengthen the traditional prejudices of inequality through their curricula, the classification of subjects on the basis of sex and the unwritten code of conduct enforced on their pupils. The concomitant of equality is responsibility and unless this is admitted by men and women equally, the desired transformation of our society will receive a severe setback. This is one area where a major change is needed in the content and

5 This document has since been revised, eliminating any reference to women. For extracts from the original draft indicating the bias against equality, see the author's paper "Higher Education of Women in India" in *Journal of Higher Education*, Vol. 1, No. 2, University Grants Commission, New Delhi.

organization of education. Educators must admit their responsibility and bring about this much-needed change in the values of the younger generation.⁶

The World Plan of Action of the United Nations, emphasizing the need for positive and affirmative action to eliminate discriminatory attitudes and to inculcate the value of sex equality, suggests the following specific measures:

- (a) Re-evaluation of text-books and other teaching materials to eliminate sexist biases, re-writing them "to ensure that they reflect an image of women in positive and participatory roles in society".
- (b) Revising of teaching methods to ensure that "they are adapted to national needs and promote changes in discriminatory attitudes".
- (c) Promotion of research "to identify discriminatory practices in education and training and to ensure educational equality".
- (d) Encouragement of co-education and mixed training groups to "provide special guidance to both sexes in orienting them towards new occupations and changing roles".
- (e) Vocational and career guidance programmes to encourage boys and girls "to choose a career according to their real aptitudes and abilities rather than on the basis of deeply ingrained sex stereotypes".
- (f) Development of informational and formal and non-formal educational programmes to increase awareness and acceptance of the public, teachers and others regarding the need to educate and train girls for occupational life.
- (g) Development of integrated or special training programmes for girls and women in rural areas to increase their participation in economic and social development. Such programmes should include not only literacy, but also training in modern agricultural methods, co-operation, entrepreneurship, commerce, marketing, animal husbandry and fisheries as well as health, nutrition, family planning, etc.

On the basis of the recommendations of the Committee on the Status of Women in India, and with a view to implementing the UN General Assembly's resolution on the World Plan of Action during the decade 1975-85, the Government of India framed a draft National

⁶ *Towards Equality: Report of the Committee on the Status of Women in India, op. cit.*, p. 282.

Plan of Action for Women. The Plan states clearly that the objectives of women's education "cannot be different from those relating to men", i.e. to prepare them to participate fully in socially productive work; to break down biases against women; to make them aware of their social, legal and economic rights; to develop self-reliance and economic independence; to impart the idea of equality and participation in development; "and above all to find full expression for her talent, ability and personality, to enable her to escape the bonds of superstition and obscurantism". However, in the specific measures suggested, traces of the old bias are not altogether absent as indicated in the following:

Special efforts should be made to enlarge the scope and coverage of pre-school education programmes like *balwadis* and *anganwadis*, where the *older girls can be given practical work experience and child-care*.

The curriculum of the middle school stage needs to be given a strong work experience orientation, introducing girls to crafts and skills which will be of direct use to them in the *family, community and farm*. . . . *It should introduce girls to scientific knowledge, principles of home-making, family life, education, nutrition and diet, environment education and civic education*.

The primary teacher training course should be revised to prepare trainees for their special responsibility in promoting girls' education in rural areas especially in adapting the content to suit the needs and interests of girls.

The objectives of vocational training programmes for girl school drop-outs *should be to render them self-sufficient* in home management and to help achieve economic independence. Programmes should include courses in sewing, knitting, cooking, nutrition, minor repairs of the house, motherhood, child-care.

Functional literacy programmes for non-student girls should include *household arts, motherhood, child-care and family planning*.⁷

THE NCERT'S FINAL DOCUMENT, "Approach to the Ten Year School Curriculum" includes a list of values and ideals to be promoted through the educational system which does not include sex equality.

It has to be understood that much of the existing bias is due to the domination of the educational system by urban middle-class life situations. Among the working population role differentiation between the sexes has never been so sharp. A tribal or lower caste child is well used to seeing his mother and sisters as workers, frequently as the only bread-winners of the family, and not only as home-makers. It

⁷ (Draft) *National Plan of Action for Women*, 1976 (emphasis added).

can, therefore, be contended that the educational system has also become a powerful instrument of the "Sanskritization process" by which middle-class norms and values influence the lower classes of society when they receive education. To this extent, the educational system has contributed to the uprooting and destruction of the relatively more egalitarian values that such children would have absorbed from their communities. Professor M.N. Srinivas has been pleading for a better understanding of the socialization practices of different communities and regional cultural groups in order to identify the educational methods needed either to correct prejudices or to use existing non-discriminatory role concepts as assets in the educational campaign. At present our notions of the family and women's roles do not reflect the realities in the lives of the masses of our people. Nor do they reflect the changes that have already occurred in many middle-class families.

The result of this contradiction and ambivalence in educational policy and practice can be seen in the increasing confusion in the minds of younger women and men in regard to their future lives, roles and aspirations. Equality is a state of mind. If education fails to develop confidence, a sense of responsibility and dignity based on independence among women, then it is not contributing to the development of equality or its acceptance. All that it is managing to achieve is a sense of discontent, frustration, and inability to function effectively in the multiple roles that life thrusts on women these days. In a few it also results in a kind of arid elitism, with alienation from social responsibilities and ability to communicate with the less privileged members of their sex. For both groups, the net outcome is a feeling of insecurity and rootlessness. On the other hand, young men are developing attitudes that deny the dignity guaranteed to previous generations of women, without accepting them as equals. The process which reduces women to "objects" or "commodities" is increasingly visible among the educated, with growing hostility to women's presence and entry into the labour force. It is a common argument that women increase the unemployment of men. Feminists describe this process as the "marginalization" of women, a movement against equality. Is it possible to re-design the educational system to the goal set before us earlier?

Suma Chitnis

Education of the Scheduled Castes and Scheduled Tribes in Maharashtra

I. THE ISSUE AND THE CONTEXT

THE EXPLICIT IDENTIFICATION of the Scheduled Castes and Scheduled Tribes as weaker sections of society and the declaration of a national commitment to their uplift and advance are among the most striking features of the Constitution of India.¹ Equally striking is the determination, expressed in Art. 46 of the Constitution, to use education as a major instrument to bring about the social transformation required to pull these two sectors of Indian society out of their traditional backwardness. This paper discusses the issue of the education of the Scheduled Castes and Scheduled Tribes in the State of Maharashtra with a view to estimating the effectiveness of education as a mechanism for bringing about the change that the Constitution envisages.

Inasmuch as the situation of the Scheduled Castes and Scheduled Tribes is roughly similar throughout the country, one may consider the impact of education upon these communities in Maharashtra to be indicative of the impact it has had elsewhere. However, in order to gain a proper perspective on the issue it is necessary to be familiar with some of the details about the situation in Maharashtra. It is particularly important to recognize that although the State of Maharashtra continues to be backward with respect to its

¹ In addition to the Preamble, a series of articles in the Constitution of India provide for the protection and welfare of the Scheduled Castes and Scheduled Tribes. These are Arts. 15, 16 and 17 of Part III; Arts. 38 and 46 of Part IV; Art. 244 of Part X; Art. 275 of Part XII; Arts. 330, 332, 334, 335, 338, 339, 341, and 342 of Part XVI; and Art. 366 of Part XIX.

Scheduled Tribes, it is considered to be one of the most advanced as far as the progress of the Scheduled Castes is concerned. Thus the course of education of the Scheduled Castes in Maharashtra should be looked upon as being indicative of the situation in a State that is relatively advanced, whereas the course of the education of the Scheduled Tribes should be viewed as being indicative of a situation wherein the tribals remain fairly backward.

In order to appreciate the advantages that the education of the Scheduled Castes in Maharashtra has had, it is important to recognize that the movement for the uplift of the Scheduled Castes had an early start in the State, and that it had become widespread long before their cause had been accepted as an issue of national concern. Efforts to remedy the religious discrimination practised against the untouchables and other low-caste Hindus date back to a period prior to the British regime, when the medieval saint poets of the Poona region, viz., Dnyaneshwar, Eknath and Tukaram, made a bid to de-Sanskritize religion and make way for the lower castes to worship the Hindu gods.² During the British period, Jyotiba Phule (1827-1890) in Poona and Shahu Maharaj in the adjacent princely state of Kolhapur launched major movements for the education of the untouchables and other low-caste Hindus.³ Thus the area that is now covered by the Poona division in Maharashtra State had the advantage of both religious and secular movements to ameliorate the lot of the Scheduled Castes long before their cause had been taken up on a national level.

In the other three divisions of the State, viz., Nagpur, Bombay, and Aurangabad, the movement did not have an equally early start, but it was positively launched by the time the country attained

2 G.B. Sardar *et. al.*, *The Saint Poets of Maharashtra : Their Impact on Society*, Orient Longman, Bombay, 1969. The Sant Kavi movement dates back to the later decades of the thirteenth century. It was a movement rooted in the *bhakti-marga* and sought to make the expression of *bhakti* or devotion possible for the lower castes by the composition of *bhajans* and *slokas* (devotional verses) in Prakrit or the language of the people. In a society which had disallowed prayer in a language other than Sanskrit and which had denied the lower castes the right to learn Sanskrit, this movement made for a measure of liberation for the right to learn Sanskrit, this movement made for a measure of liberation for the lower castes in spite of the fact that it preached forbearance and silent acceptance of the status quo and, by implication, of the caste system.

3 Jyotiba Phule was the first Indian to start a school for untouchables in Maharashtra. For details of the movement launched by him, see Dhananjay Keer, *Mahatma Jotirao Phuley*, Popular Prakashan, Bombay, 1964.

Independence. Wardha in Nagpur division enjoyed the advantage of being the location for Sewagram, the headquarters of Gandhiji and the centre from which his nationwide crusade for the cause of Harijans was conducted. Nagpur, the capital of this division, happens to be the place at which Ambedkar held the massive conversion of Harijans to Buddhism. Bombay city, the capital of Maharashtra and the principal city of the Bombay division, had, as a metropolitan city and as one of the major centres of social reform movements in the country, been early involved in the movement for the uplift of the Scheduled Castes. The movement in the Bombay division was not confined to the city of Bombay. It was at Mahad which now forms part of the Bombay division that Ambedkar organized in 1927 his first major protest against the exclusion of the untouchable castes from the use of lakes and wells from which caste Hindus drew their water supply. It was at Mahad, again, that later in the same year Ambedkar made a bonfire of the *Manusmriti* to register his rejection of the traditional legitimization of caste.⁴ While the Poona, Nagpur, and Bombay divisions were thus involved in the Scheduled Caste movement long before Independence, the Aurangabad division lingered behind. However, the late start of the movement in Aurangabad was compensated by the work of the People's Education Society at Aurangabad from 1950 onwards. This Society, established by Ambedkar and his associates for the purpose of furthering the education of the Scheduled Castes in Maharashtra, has done outstanding work in promoting education among the Scheduled Castes of the Vidarbha and Marathwada regions.

Today Maharashtra stands out as the only State in the country in which the percentage of the enrolment of the Scheduled Castes to the total school enrolment at each level of school (viz., primary school, middle school, and high school) is equal to or even higher than the percentage of the Scheduled Castes in the total population of the State.⁵ Evidence of the relative progress of education among the Scheduled Castes in Maharashtra is also available in the fact that the State is the largest beneficiary of the post-matric scholarship scheme sponsored by the Central government. Although the Scheduled Castes in the State account for only 3.8 per cent of the total Scheduled Caste population of the country, they receive about 17 per cent of the

4 W.N. Kuber, *Ambedkar : A Critical Study*, People's Publishing House, Bombay, 1973.

5 The following table describes the situation (*Contd. on p. 222*):

amount spent by the Government of India on the post-matric scholarship scheme. While discussing the issue of the education of the Scheduled Castes in Maharashtra, it is therefore necessary to bear in mind both the fact of the present advance of education among them in the State and the early impetus to change.⁶

The State is not equally advanced with respect to the Scheduled Tribes. In fact, prior to Independence very little had been done to improve the lot of the tribals. As in other parts of the country, Christian missionaries had made some efforts to carry education and medical facilities to the remote tribal districts, but they had not achieved spectacular successes of the kind obtained in Assam with the Nagas for instance. In the post-Independence period there have been some major movements among the Scheduled Tribes of the State. These are largely political in character. The most prominent is the

Difference Between Percentage Enrolment of Scheduled Caste Children to Total Enrolment (1964-65) and Percentage Population of Scheduled Castes by States.

	Percentage of Scheduled Caste Population in the State	Primary, Junior Basic	Middle, Senior Basic	High, Higher Secondary	University or Other Higher Education
Andhra Pradesh	13.8	+0.2	-4.2	-5.6	-8.4
Assam	6.2	+0.9	+0.2	-0.1	-1.8
Bihar	14.1	-3.7	-6.2	-8.2	-10.3
Gujarat	6.6	+1.0	+1.3	-1.6	-4.4
Kerala	8.4	+2.2	+0.8	-0.4	-4.7
Madhya Pradesh	13.1	-3.2	-4.7	-7.8	-9.4
Madras	18.0	+0.1	-3.1	-5.2	-13.0
Maharashtra	5.6	+4.7	+2.7	+2.3	+1.9
Mysore	13.2	-0.6	-4.3	-7.5	-10.4
Punjab	20.4	-6.9	-11.5	-12.0	-15.8
Rajasthan	16.7	-4.3	-8.0	-10.6	-14.8
Uttar Pradesh	20.9	-7.6	-10.1	-12.1	-16.3
West Bengal	19.9	-3.5	-8.5	-13.7	-14.3

Source : *Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1970-71.*

6 Figures compiled from the Statistical Mimeographs put out by the Department of Social Welfare, Government of Maharashtra, Bombay.

movement led by Godavari Parulekar⁷ among the Warlis of the Thane district and more recently by a heterogeneous group of young radicals in the Dhulia district.⁸ The thrust of both these movements has been in the direction of awakening the consciousness of the tribals, of making them aware of the exploitation they are exposed to, and of inculcating in them courage, ability, and self-confidence to fight for their rights. It is against the background of these features that the following discussion of the issue of the education of the Scheduled Tribes in the State may be viewed.

THE CONSTITUTIONAL COMMITMENT to the education of the Scheduled Castes and the Scheduled Tribes as "weaker" sections implies the assumption of a weakness that can be overcome through education. What, we may ask, is the nature of this weakness and how is education expected to help?

When the Constitution was framed the "weakness" of the Scheduled Castes and Scheduled Tribes was evidenced in several features of their situation. In a country where practically seventy per cent of the population could be described as poor, illiterate and powerless, the Scheduled Castes and Scheduled Tribes stood out as being poorer, more illiterate, and more powerless than the others. What was perhaps even more significant was that the possibilities of their mobility and advance were more restricted than they were for others. In the case of the Scheduled Castes, both their backwardness and the constraints on their mobility came from the caste system which confined them to low-status occupations, denied them access to education and to other opportunities for social or economic advance, denied them entry into temples and places of worship, relegated them to a low ritual status, and made them highly vulnerable to exploitation by high-caste Hindus. Added to this was the fact that the Scheduled Castes were generally confined to the rural areas of the country, away from urban centres of opportunity and advance.

The source of the backwardness of the Scheduled Tribes was different, and so also the source of the constraints on their mobility and advance. Their poverty and ignorance are a consequence of their isolation from the mainstream of life. As aborigines of the land they

7 Godavari Parulekar, *Adivasis Revolt*, National Book Agency, Calcutta, 1975.

8 *Economic and Political Weekly*, 1970, p. 510; 1972, p. 205; 1973, pp. 501, 1129, 1525, 1838, 1987; 1974, pp. 173, 389, 615, 1469; 1975, pp. 97, 565, 656, 781, 973.

lived in remote areas, allowed themselves to be tucked away in forest districts or equally remote coastal regions. Through centuries they had confined themselves to their own simple, often primitive, cultures, their own tribal languages and dialects, and had at most a marginal relationship with the complex and sophisticated village or city life of the non-tribals.

While cultural and physical isolation kept the tribals out of the orbit of development their simplicity and credulousness, typical of those who belong to primitive cultures, made them highly vulnerable to exploitation by non-tribals. This exploitation generally took the form of their use as cheap labour for forestry and farming. It also involved them in indebtedness, which in turn forced them into bonded labour and obliged them to serve landowning families generation after generation. Their ill-treatment was also evident in that, although outside the fold of Hinduism, they were generally treated as untouchables in the course of their encounters with Hindu society.

The continued exploitation of the Scheduled Castes and Scheduled Tribes, their suppression into inferior secular and ritual status, their inequality and powerlessness were legitimized not only by the caste system and by belief in the doctrines of *Karma and Varnashrama* on the religious plane, but by an overall value-system which accepted inequality and ascription of status. With the attainment of Independence and acceptance of the ideals of democracy, secularism, egalitarianism, and integration, the situation of the Scheduled Castes and Scheduled Tribes stood out as a dark and ugly blot on the fabric of Indian life. The efforts of social and political reformers throughout the British period had already triggered the process for the removal of this blot. But the declaration of untouchability as an offence and the Constitutional commitment to provide economic assistance, education, and other forms of protection to the Scheduled Castes and Scheduled Tribes was a forceful bid to remove it altogether. Thus the objective behind the promotion of education among them was clear and simple – viz., to uplift and integrate these communities, by equipping them for occupational mobility, economic advance, and social and cultural equality with the caste Hindus.

II. THE OUTCOME IN MAHARASHTRA

WHEN SPECIAL FACILITIES for the education of the Scheduled Castes and Scheduled Tribes were launched with the First Five Year Plan in 1951, it was hoped that their advance would be so rapid that within a

period of ten years protective discrimination would no longer be required. In other words, it was hoped that the gap between the Scheduled Castes/Scheduled Tribes and the others was expected to be bridged during the space of these ten years. It is interesting to see how far these expectations have been fulfilled in Maharashtra.

From the data on the situation of the Scheduled Castes and Scheduled Tribes available in the Census reports and in the reports of some of the empirical studies that have been conducted, it is possible to assess the present situation of these communities in Maharashtra and to examine the extent to which their situation has changed since Independence. Since the major objective in educating the Scheduled Castes and Scheduled Tribes has been to promote their occupational mobility, economic uplift, and social acceptance, it would be useful to consider these three aspects of their situation more specifically and to examine whether they have achieved the mobility and equality desired.

1. Occupational Situation and Mobility

IN THE MATTER OF OCCUPATIONAL MOBILITY, the data are meagre and fragmented. Nevertheless, pieced together, they offer some clues to the situation.

Data on Reserved Employment. In order to ensure occupational mobility among the Scheduled Castes and Scheduled Tribes, and particularly to consolidate the gains from their education, the government has, in addition to launching programmes for their education, instituted a policy of reserving a quota in employment. In Maharashtra 5.86 per cent of the posts in government are reserved for the Scheduled Castes and 13 per cent are reserved for the Scheduled Tribes. In spite of this the Scheduled Castes constitute only 2.1 per cent in Class I services and 2.2 per cent in Class II services. They constitute 10.5 per cent and 23.6 per cent in Class III and Class IV services respectively, and are thus well represented at least in these two categories of employment. As for the Scheduled Tribes, they are under-represented in all classes of employment. They constitute 0.3 per cent in Class I services, 0.3 per cent in Class II services, 2.3 per cent in Class III services, and 3.8 per cent in Class IV services. Their representation in government employment is altogether poor.⁹

⁹ *Twenty-first Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1971-72 and 1972-73*, Ministry of Social Welfare, Government of India, New Delhi, Chapter III.

To a certain extent, the poor representation of the Scheduled Castes and Scheduled Tribes in the different services of the State may be attributed to the poor implementation of the policy of reservations. However, the major explanation for the non-utilization of the positions reserved for them in government service seems to be their failure to equip themselves with education of the kind required to qualify for these positions. The latter point of view is strongly supported by the findings of a study undertaken by the Director-General of Training and Employment, and published in the latest report of the Commissioner for Scheduled Castes and Scheduled Tribes. This study points out that "the proportion of filled vacancies to those notified is highest in the case of the illiterates. As the educational requirements of reserved vacancies increase the proportion of vacancies filled goes on decreasing".¹⁰

Census and Other Data. The situation of the Scheduled Castes and Scheduled Tribes in the reserved employment provides the best clue to their occupational status. Nevertheless it is useful to look at other data indicating their occupational situation.

In the case of the Scheduled Castes we find that according to the 1971 Census the majority (62 per cent) of the male workers are engaged in cultivation, agricultural labour, mining, quarrying, keeping livestock, forestry, etc. The percentage of those who are thus employed has not decreased since 1961 (61 per cent). However, more specific data on occupational mobility among the Scheduled Castes of Maharashtra available from two studies done recently indicate a measure of mobility. The first is a survey of 206 towns and villages from eight districts of Maharashtra conducted by the Rashtra Seva Dal between 1969 and 1972.¹¹ The second is an M.Phil. dissertation prepared by R. K. Jadhav of the Tata Institute of Social Sciences at Bombay between 1974 and 1976.¹²

The Seva Dal study reveals that as many as 59 per cent out of the 4,475 families covered by the study had entirely changed from their traditional occupations. In 31 per cent of the families, the head of the

¹⁰ *Ibid.*

¹¹ Govind Gare and Shirubhau Limaye, *Maharashtrantil Dalit* (in Marathi), Sahadhyayan Prakashan, Bombay, 1973.

¹² R.K. Jadhav, *Socio-Economic Disabilities of the Scheduled Castes in Maharashtra*, Dissertation submitted for the M. Phil. degree of the Tata Institute of Social Sciences, Bombay.

family had given up the traditional occupation although the other members of the family continued to follow it. The remaining 10 per cent of the families had not responded to the question.

The Seva Dal study conveys the impression that there has been substantial occupational mobility within the families covered by the study. That this may not really be so is suggested by the data from the study by Jadhav. In the urban sample studied by Jadhav the majority (69 per cent) of the respondents follow the traditional occupation. Some mobility is evident in the fact that this percentage is smaller, by 11 per cent, than the percentage of those who say that their father followed a traditional occupation (80 per cent). But the mobility is not as substantial as the Seva Dal study may lead us to believe. In the village samples in the study mobility is even less evident. In fact, data from one of the two villages covered reveal regression to the traditional occupation. In one village 76 per cent of the respondents state that they follow the traditional occupation as against 82 per cent who say that their fathers followed the traditional occupation. However, in the second village the percentage of those who follow traditional occupations (85 per cent) is, in fact, larger than the percentage of those whose fathers are in a traditional occupation (82 per cent).

Where studies provide detailed breakdowns on occupational mobility, they indicate that the Buddhists among the Scheduled Castes show greater mobility than the non-Buddhists, the Mahars show greater mobility than the Mangs, and so on. This indicates that the progress of the different Scheduled Castes in the State is uneven. Somewhat unexpectedly, they also indicate that change from the occupation followed by the father is more marked among respondents who come from landless families than among respondents who come from families that owned some land. The explanation offered by the author of one of the studies is that those with land tend to be absorbed in agriculture and allied occupations followed by the family. The landless, however, are forced to seek a living elsewhere. If the villages or towns in which they live offer scope for their traditional services and professions they may continue in the family occupation. However, if they do not, and if consequently they need to change their occupation, they do so. If the social environment allows change they gain mobility. Their status as landless workers thus contributes to their mobility. One assumes that where the landless are educated their chances of vertical mobility are greater.

As regards the tribals, the 1971 Census for Maharashtra indicates

that an overwhelming majority, 94 per cent, of them are engaged in cultivation, agricultural labour, forestry, fishing, livestock-raising, and other allied activities. These may be considered to be their traditional occupations. If so, one must concede that they have not gained much occupational mobility so far. In fact, a comparison between the Census figures for 1971 (94 per cent) and 1961 (91 per cent) reveals a marginal increase in the percentage of the tribals involved in traditional occupations.

While the Census data provide an overview of the tribal situation, a study by Govind Gare, *Tribals in an Urban Setting*, provides specific details about tribals who migrate to urban areas.¹³ Gare found that tribals who migrate for work gain horizontal mobility without much change in occupational status. But a few do gain mobility of both kinds. As many as 45 per cent from a sample of 140 Mahadeo Kolis who had migrated to Pune, and whose fathers were engaged in cultivation, agricultural labour, or forestry, found work as unskilled labourers. Another 21 per cent found work in the services normally followed by the lower castes. Eleven per cent became unskilled labourers. Thus practically 77 per cent were confined to low-status occupations upon their migration. However, as many as 13 per cent found work at the lower clerical level, and between 2 and 3 per cent each gained entry into skilled supervisory work, higher clerical or administrative work, business and trade, or other miscellaneous occupations. The latter, who together constitute 23 per cent of the sample, represent those who have made a distinct departure upward from the occupational status of their fathers. Possibly they were able to do so because they were educated.

Aspirations of School and College Students. The data discussed so far do not provide for a direct observation of the extent to which education contributes to occupational mobility. Inasmuch as mobility is limited one may assume that when it occurs education contributes significantly to the process. The extent and manner of this contribution need to be more precisely understood. Data from a study of the Scheduled Caste and Scheduled Tribe high school and college students sponsored by the Indian Council of Social Science Research and conducted by the Tata Institute of Social Sciences provide more specific clues to understanding the effectiveness of education in

13 Govind Gare, *Tribals in an Urban Setting*, Shubhada Saraswat, Pune, 1976.

promoting occupational mobility among persons belonging to these communities.¹⁴

These data suggest that education positively promotes motivation for mobility. Very few of the Scheduled Caste school (11 per cent) and college students (6 per cent) covered by the study say that they would "like" to enter the occupation followed by their fathers. The fact that the inclination to follow the father's occupation is less widespread among college students than among school students suggests that the higher the level of education achieved, the greater is the inclination to occupational mobility.

It is interesting to observe that although desirous of mobility young educated members of the Scheduled Castes and Scheduled Tribes do not seem as yet to be confident of seeking this mobility through open competition. Asked to indicate their preference as between government, semi-government, or private service or self-employment, an overwhelming majority (more than 80 per cent) of school and college students opted for government service, presumably because it offered them the security of "reserved" employment.

2. Economic Status

THE ECONOMIC STATUS of the Scheduled Castes and Scheduled Tribes is the second factor in terms of which we may assess their situation. To gauge the economic status of the Scheduled Castes and Scheduled Tribes it is necessary to compare them with the non-scheduled castes and non-scheduled tribes. Although some studies provide information on the income level of the Scheduled Caste and Scheduled Tribe population in Maharashtra, they do not provide for comparisons between these communities and others. The only means of comparison are Census data on the situation in agriculture.

Table 1, which gives the occupational distribution of the Scheduled Castes and the Scheduled Tribes in the State, indicates that in agriculture the percentage of those who are agricultural labourers as against cultivators is much larger among the Scheduled Castes than among the total population. According to 1971 Census figures, the distribution is as shown in Table 2.

This fact together with one's own general observation of the economic situation of the Scheduled Castes in the State suggests that

14 *The Problems of Scheduled Caste and Scheduled Tribe School and College Students of Maharashtra* (Mimeo.), Tata Institute of Social Sciences, Bombay, Indian Council of Social Science Research, New Delhi.

Table I

Percentage Distribution of the Scheduled Caste Males/Scheduled Tribe Males and the Total Population of Males into the Nine Broad Categories of Economic Activity as Shown in the Census of 1961 and 1971.

Category	1961 Census			1971 Census		
	Sche- duled Castes	Sche- duled Tribes	Total	Sche- duled Castes	Sche- duled Tribes	Total
I. Cultivators	18.16	51.85	40.68	14.99	46.31	36.17
II. Agricultural Labourers	38.88	35.10	18.12	46.18	45.01	21.54
III. Mining, Quarrying, Livestock-raising, Forestry, etc.	4.02	4.68	2.97	1.70	2.23	2.12
IV. Household Industry	14.21	0.94	4.80	0.31	0.09	3.12
V. Manufacturing other than Household Industry	6.88	1.60	10.22	17.95	1.96	12.53
VI. Construction	1.80	0.61	1.69	1.97	0.59	1.79
VII. Trade and Commerce	1.53	0.55	6.61	2.11	0.74	8.54
VIII. Transport, Storage and Communication	2.72	0.77	3.65	3.55	0.72	3.95
IX. Other Services	11.80	3.91	11.26	11.24	2.35	10.24
	100%	100%	100%	100%	100%	100%

Table 2

	Agricultural Labourers (percentage of total male workers)	Cultivators (percentage of total male workers)
Total male population of workers	21.54	36.17
SC male population of workers	46.18	14.99
ST male population of workers	45.01	46.31

they continue on the whole to be poorer than the rest of the population.

As regards the Scheduled Tribes, the data indicate that the percentage of Scheduled Tribe cultivators is almost equal to that of labourers, and in fact larger than the percentage of cultivators in the total population. This conveys the impression that the Scheduled Tribes in the State are not only better-off than the Scheduled Castes, but better-off than the rest of the population as well. However, this impression is belied when we note that the quality of the cultivation in which the Scheduled Tribes are engaged is so primitive and poor that they continue to be impoverished and, not infrequently, economically worse-off than the non-tribal labourer.

3. Social Acceptance and Rejection

WHILE EDUCATION WAS PRIMARILY LOOKED UPON as a mechanism for promoting the economic uplift and occupational mobility of the Scheduled Castes and Scheduled Tribes, it was also expected to liberate them from the discrimination and social segregation to which they had been subjected over the years. In fact, education was expected to supplement the Untouchability Offences Act and to help eradicate discriminatory caste practices altogether. Therefore the social situation of the Scheduled Castes and Scheduled Tribes may be taken up as the third and possibly the most important indicator of their movement towards equality.

Continued Discrimination. Data from the Seva Dal study reveal that there has been very limited progress in this direction.¹⁵ By 1973 the Scheduled Castes in Maharashtra could freely use caste Hindu wells only in 47 out of the 206 places covered by the study, and in the remaining 159 they were denied the use of caste Hindu wells. (In 57 of these 159 places they had their own separate wells and the issue was not so urgent.) Similarly, the Scheduled Castes had free access to Hindu temples in only 52 out of 206 places. In 126 places they were denied entry altogether and in the remaining 28 villages they had limited access.

As regards the use of services and facilities, the data indicate that the barber's services were freely available to the Scheduled Castes in only 72 places. In the remaining 134 places these services were either denied to them altogether or given at an exorbitant price. As many as

15 Govind Gare and Shirubhau Limaye, *op. cit.*

70 places had tea shops or restaurants. Out of these 70, only 30 accepted Scheduled Caste customers. In as many as 23 places the Scheduled Castes were not accepted as customers but made to sit apart. Similarly, 189 places had gymnasiums, but only 59 out of them allowed the Scheduled Castes to use them. Again, only in 49 places the Scheduled Castes were allowed to participate as equals in the village festivals. What is probably most revealing is the treatment meted out to the Scheduled Castes at school. In as many as 40 places, schools refused to accept Scheduled Caste students on equal terms. Children belonging to these castes were not only made to sit apart in the classroom but they were discriminated against in other ways as well.

Corresponding data are not available for the Scheduled Tribes of Maharashtra, but the extent of their social degradation may be gauged from the literary and journalistic accounts of their situation. Probably the most expressive of these is Godavari Parulekar's Sahitya Academy award-winner on the Adivasis' revolt in which she describes the "awakening" of the tribals in the Thane district of Maharashtra where she and her husband worked for their welfare.¹⁶ The degradation in which most of the tribals of the State live is conveyed by the fact that the "awakening" and the "revolt" that the author describes barely succeed in lifting the tribals from a totally sub-human existence to a life of self-respecting poverty.

The foregoing description of the occupational, economic, and social situation of the Scheduled Castes and Scheduled Tribes in Maharashtra indicates that although education (and possibly other factors) may have brought about some change in their situation since Independence, they have not yet been integrated as equals in Maharashtrian society.

III. LIMITATIONS OBSERVED AND GUIDELINES FOR ACTION

THE EXPLANATION FOR THE FAILURE to promote equality and integration seems to lie in several inadequacies in the situation of the Scheduled Castes and Scheduled Tribes. These may be summed up as follows:

1. The continued backwardness of the Scheduled Castes and Scheduled Tribes in the State in the matter of access to education.

¹⁶ Godavari Parulekar, *op. cit.*

2. The uneven educational progress of the different sectors of the Scheduled Caste and Scheduled Tribe communities in the State.
3. The poor performance of students from the Scheduled Caste and Scheduled Tribe communities in the State.
4. Limited utility of education as a mechanism for status mobility and change.

1. Continued Backwardness in Access to Education

IF EDUCATION IS TO FUNCTION AS AN EQUALIZER, it is necessary that access to education is equal. But education is not yet as widespread among the Scheduled Castes and Scheduled Tribes as it is among others. Detailed data on enrolment of the Scheduled Castes and Scheduled Tribes at different levels of education in different districts of the State bring out the disparities very clearly. It is not possible to present details on these disparities within the brief span of this paper, but the point may be illustrated by quoting some basic facts and figures.

The Census of 1961 indicates that whereas 11.85 per cent of the total population were full-time students the percentage of full-time students dropped to 7.67 per cent for the Scheduled Castes and even lower, to 3.6 per cent, for the Scheduled Tribes. Unfortunately, the Census of 1971 does not provide data on the percentage of students in the respective populations, but the literacy figures available in this Census provide a more recent clue to the situation. According to the Census of 1971, only 25.27 per cent of the Scheduled Caste population and 11.74 per cent of the Scheduled Tribe population as compared to 34.18 per cent of the total population of Maharashtra is literate. These figures indicate that the Scheduled Castes and Scheduled Tribes do not have as much access to education as the others have. As long as disparities in access to education continue, it is unrealistic to expect equality in other spheres.

The fact that the education of the Scheduled Castes and Scheduled Tribes lags behind that of the others is generally detrimental to their advance towards equality, particularly because this lag is most pronounced in the regions of the State in which industrial or commercial growth is most marked, and where consequently education is most crucial to advancement.

Comparison between the different districts of the State reveal that disparities between the Scheduled Castes/Scheduled Tribes and the rest of the population are more pronounced in urban areas than in the

rural areas. For instance, among the twenty-six districts of the State, the disparity between the Scheduled Castes and the rest of the population is most pronounced in Greater Bombay, which is the centre of industrial and commercial activity. The literacy rate for the total population in Greater Bombay (58.6 per cent) is larger by 23.6 percentage points than the rate of literacy for the Scheduled Caste population of the district (35 per cent). In relatively backward districts such as Bhir or Chandrapur the disparity remains, but it is less marked. In Bhir, for instance, the literacy rate for the total population (15 per cent) is larger by only 9 percentage points than the rate for the Scheduled Caste population (6 per cent). In Chandrapur the rate of literacy for the total population (17 per cent) is larger by only 3 percentage points than for the Scheduled Caste population of the district.¹⁷

The fact that the disparity between the Scheduled Castes/Scheduled Tribes and the rest of the population is more pronounced in the districts which offer the greatest opportunity for employment in industry, commerce, and administration must, one imagines, prevent them from gaining occupational mobility and equality through the new opportunities that come up in the developing areas of the State.¹⁸

2. Uneven Growth of Education

EQUALLY DETRIMENTAL TO THE RAPID ADVANCE of the Scheduled Castes and Scheduled Tribes is perhaps the highly uneven growth of education within these communities.

Statistics from the State Department of Social Welfare indicate that certain groups such as the Mahars among the Scheduled Castes and the Gonds among the Scheduled Tribes have advanced far ahead of others. Their representation in school and college enrolment and their utilization of scholarships, free-studentships and other facilities is totally out of proportion to the size of their representation in the population. Data from the ICSSR study support these facts.¹⁹ In addition, they reveal other imbalances. It is evident, for instance, that education is much more easily available to those from among the Scheduled Castes and Scheduled Tribes whose parents are literate or are in the organized sector of employment than it is to others.

¹⁷ Suma Chitnis, *Literacy and Educational Enrolment Among the Scheduled Castes of Maharashtra*, Tata Institute of Social Sciences, Bombay, 1974.

¹⁸ *Ibid.*

¹⁹ As in footnote 14.

Although 75 per cent of the Scheduled Caste population of the State is illiterate, only 40 per cent of the Scheduled Caste school students and 27 per cent of the Scheduled Caste college students covered by the study have illiterate fathers. Similarly, whereas 88 per cent of the Scheduled Tribe population of the State is illiterate, only 40 per cent of the Scheduled Tribe school students and 31 per cent of the Scheduled Tribe college students covered by the study have illiterate fathers. Although 62 per cent of the Scheduled Caste male population of the State is engaged in farming, livestock-raising, forestry, etc., only 2 per cent of the Scheduled Caste school students and 1 per cent of the college students covered by the study have fathers who follow these occupations. Similarly, whereas 93 per cent of the Scheduled Tribe male population of the State is engaged in farming, livestock-raising, forestry, etc., only 2 per cent of the Scheduled Tribe school students and 16 per cent of the Scheduled Tribe college students say that their fathers belong to these occupations.

Do the more advanced castes and tribes and the more educated from among the Scheduled Castes and Scheduled Tribes compete aggressively for the facilities provided for these communities, consciously edge out others from their community, and appropriate most of the benefits for themselves? There is no evidence to indicate that they do. It is possible that the greater progress of those who are already relatively advanced reveals what in other contexts has been observed to be a characteristic of growth in developing societies – viz., that programmes for development facilitate the advance of those who have a lead, and leave those who are backward further behind. Whatever the explanation for the situation observed, the fact remains that the confinement of education to the relatively advantaged among the Scheduled Castes and Scheduled Tribes interferes with the advance of these communities considered as a whole – unless, of course, those who forge ahead function effectively to uplift the others.

Unfortunately, this does not happen. In fact, the educated from among the Scheduled Castes and Scheduled Tribes do not even seem to be willing to identify themselves with their own communities, much less to take on the responsibility for the advance of those who lag behind. Rather, they seem to be eager to mask their own Scheduled Caste or Scheduled Tribe identities as they seek personal advance and mobility. Evidence of such efforts is available in the fact that many of them renounce family names or surnames which are likely to reveal their low-caste or tribal origins and take on family names or surnames

that are typically high-caste, preferably Brahmin.

3. *Unsatisfactory Progress and Performance of Those*

Who Have Access to School and College

WHILE, AS HAS BEEN DISCUSSED ABOVE, the poor and uneven spread of education among the Scheduled Castes and Scheduled Tribes poses the most serious obstacle to their advance, the poor performance of those who do manage to find their way into school and college further restricts the effectiveness of education as a mechanism for their development.

As has been pointed out earlier, the benefits of reserved employment in the State are largely unutilized because qualified persons are not available for the reserved positions. Although the Scheduled Castes and Scheduled Tribes in Maharashtra have started enrolling in school and college in significant numbers, their advancement in education is not yet of a high enough order to qualify them for positions for which a good level of performance or skilled or professional training is required. In fact, the monograph on Literacy and Educational Enrolment among the Scheduled Castes of Maharashtra referred to earlier indicates that one of the major obstacles to the effective functioning of education as a mechanism for the advance of the Scheduled Castes and Scheduled Tribes seems to be the inability of students from these communities to do satisfactorily and to progress through school and college. Their poor performance, leading to repeated failure, consequent stagnation and drop-out, is due to their inability to cope with the demands of school and college. So also possibly their tendency to cluster into inferior educational institutions, their tendency to choose non-prestigious courses, their inclination towards courses that do not lead to high-status occupations, and so on. A corresponding analysis is not available for Scheduled Tribe students but one may assume that the situation is identical, if not worse.

The poor performance of Scheduled Caste and Scheduled Tribe students at school and college is due partly to their poverty and partly to the fact that they belong to sub-cultures that have traditionally been excluded from education. Handicaps emerging out of these two distinctly different sources of educational backwardness merge to create a cumulative obstacle in the educational careers of Scheduled Caste and Scheduled Tribe students. If these students are to be helped to perform better in education, it is necessary to identify how these

two factors inhibit learning and make for poor performance, and to develop strategies to enable them to overcome these inhibitions. Research aimed at identifying the difficulties that Scheduled Caste and Scheduled Tribe students in the State face are already under way. The findings from some of the studies done offer some valuable guidelines for action.

Poverty. Studies on the manner in which poverty inhibits education reveal that children from poor homes perform poorly or drop out of school largely because they are unable to combine the demands of school with domestic or other responsibilities that they are required to carry at home. The school system, as it exists, is structured to suit children who are not required to earn a livelihood or to carry a substantial share of domestic responsibilities during the period in which they take formal education. Coming as they do from circumstances in which children are required to share fully in the domestic chores of the family as well as of tasks involved in the occupation that the family follows for a livelihood, Scheduled Caste and Scheduled Tribe children, like other children who belong to cultures of poverty, find it difficult to cope with requirements of school attendance and household work. If the objective of assisting the Scheduled Castes and Scheduled Tribes to obtain mobility through education is to be achieved more effectively, it is necessary to revise the structure of the school system in the State so as to make school more practicable for children from poor homes.

In addition to the fact that they are unable to cope with the demands of school, children from poor homes are handicapped by other shortcomings that arise out of their poverty – for instance, malnutrition, poor health, and susceptibility to illness, inability to afford books, stationery and decent clothes to wear to school, and lack of a place to study. Contrary to the general impression that scholarships, free-studentships, and other facilities available to the Scheduled Castes and Scheduled Tribes enable them to overcome the handicaps of poverty, data on the situation of Scheduled Caste and Scheduled Tribe students in the State available from the ICSSR study reveal that the assistance provided does not bring adequate relief.

Asked to describe their economic situation, as many as 46 per cent of the Scheduled Caste school students, 49 per cent of the Scheduled Caste college students, 46 per cent of the Scheduled Tribe school students, and 36 per cent of the Scheduled Tribe college students

covered by the study categorically state that their economic situation is "difficult". Less than 15 per cent from any of the four categories of students say that their economic situation is comfortable. That the scholarship and free-studentship programmes for Scheduled Caste and Scheduled Tribe students in the State do not really resolve their difficulties is evident from the fact that less than 5 per cent of the Scheduled Caste and Scheduled Tribe school students and less than 15 per cent of the college students say that the cost of their education is "entirely" covered by the assistance they receive through scholarships. The others, who constitute an overwhelming majority, say that they have to seek supplementary help from parents or relatives.

That poverty means inability to devote adequate time to academic work is evident from the fact that 20 per cent of the Scheduled Caste and Scheduled Tribe college students say that they have to spend between three and four hours, or even more, everyday on domestic chores or other responsibilities. Between 25 and 30 per cent of the students from each of the four categories complain that although they would like to devote more time to studies, they are unable to do so because of their domestic responsibilities. Less than 40 per cent of the students say that they have a place to study at home and between 30 and 50 per cent are unable to afford the extra tuition or coaching they think they need. These problems of poverty are not unique to Scheduled Caste and Scheduled Tribe students. Others who are economically disadvantaged also possibly suffer from the same constraints. But the point is that Scheduled Caste and Scheduled Tribe students suffer from these disadvantages in addition to the cultural disadvantages they have to bear. Also, they continue to be economically handicapped for education in spite of the massive efforts to relieve them from this disability.

Cultural Disadvantage. While the data from the ICSSR study illustrate obstacles arising from poverty, research of the kind that has been done by the State Institute of Education in the course of its Tribal Dialect Project illustrates the cultural disadvantage suffered by students from these communities. The findings of this project, which aims at identifying the peculiarities of the tribal dialects with a view to helping tribal children overcome difficulties with language at school, reveal that basic differences as between construction and pronunciation in tribal dialects and the dialects that tribal children are

required to use at school are likely to hamper the learning and self-expression of the tribal child. The study suggests that this fact needs to be taken into account in the schooling of tribal children, particularly in the evaluation of their work.²⁰ Also, remedial language programmes need to be designed and offered in order to help tribal children keep pace with non-tribal children in language work. It is necessary, similarly, to identify the nature of other specific cultural obstacles to learning faced by Scheduled Caste and Scheduled Tribe children, and to design strategies to enable them overcome these handicaps. In view of the simplicity of the cultures from which these children come, other handicaps – for instance, inability to deal with numbers or with concepts – are to be expected.

Lack of Guidance. In addition to poverty and cultural disadvantages, Scheduled Caste and Scheduled Tribe students seem also to suffer from a lack of proper guidance. As pointed out earlier, the monograph on Literacy and Educational Enrolment among the Scheduled Castes of Maharashtra reveals that Scheduled Caste students cluster into inferior educational institutions and that they tend to choose non-prestigious courses leading to relatively low-status occupations. It may be argued that this is entirely a consequence of their poor performance. But data from the ICSSR study suggest that this could also, at least partly, be a consequence of unsatisfactory guidance on what kind of courses to choose and which institutions to go to. The majority of the Scheduled Caste and Scheduled Tribe students covered by the study say that it was on the father's advice that they chose the high school/college at which they were studying. Since an overwhelming majority of them have fathers who have never been to high school or college, the advice they received could not have been based on a proper understanding of the alternatives and opportunities. In order to optimize the benefits of education to the Scheduled Castes and Scheduled Tribes in the State it would be useful to set up centres at which both students and elders from these communities could be advised with regard to the opportunities, options, and alternatives available in education.

Dealing with Handicaps. In order that Scheduled Caste and Scheduled Tribe students may improve their performance in education

20 Mimeographed papers of the State Institute of Education's Tribal Dialect Project (Extension Department), Poona, 1975.

it is necessary to tackle systematically each of the handicaps to their schooling. Beginnings in this direction have already been made. Some of the programmes to remedy learning disabilities are specifically geared to the shortcomings of students from these communities. Others are more generically directed to all those who are disadvantaged for education. For instance, in view of the observation that children from slums and chawls find it difficult to adapt themselves to the middle- and upper-middle-class culture of the classroom, the Bombay Municipal Corporation has recently launched a scheme for the revision of primary school textbooks with a view to changing their middle-class bias and making their content and context more relevant to the experience of urban lower-class and lower-middle-class children from slums and chawls.

At quite another level, the IIT at Powai in Bombay has instituted the practice of providing an additional year's instruction to Scheduled Caste and Scheduled Tribe students who are admitted under the policy of reservations. The additional year is utilized to give these students special coaching to enable them to come up to the level of those who have been admitted through open competition. Both kinds of programme need to be extensively organized at all levels of education.

4. *Limited Utility of Education*

WHILE THE NEED TO IMPROVE THE PERFORMANCE of Scheduled Caste and Scheduled Tribe children who find their way into school and college stands, it is necessary to raise the basic question whether, and to what extent, formal education as presently structured can bring about the desired change.

Shortcomings in Education. The faith in education as a mechanism for ensuring mobility and equality for the Scheduled Castes and Scheduled Tribes is not only based on the conviction that education will equip them for occupations that carry status and incomes superior to those that are given to the occupations that they have traditionally held, but also on the assumption that education will make them more modern and progressive in their outlook, sharpen their awareness of the injustice of their situation, and make them more able and confident in the exercise of their rights and in the use of their political power.

Both assumptions are open to question. The growing unemployment of the educated in the country suggests that the

education that is imparted is not suited to generate the kind of economic development that the country needs. While agriculture, which is the principal occupation in the country, continues to remain neglected and undeveloped, the educated flock to white-collar or blue-collar jobs in commerce, transport, industry, and services of different kinds. It is necessary to change this trend and to gear education so as to equip and motivate the masses to improve their own economic situation, and simultaneously to contribute to the country's economic growth by involving them more effectively and productively in farming, forestry, fishing and allied occupations, and in the traditional crafts. A large section of the Scheduled Caste and Scheduled Tribe population is currently involved in these occupations. Educational reforms aimed at directing education more purposively towards the development of these occupations in the State should therefore contribute substantially to the advance of these communities.

Similarly, the ICSSR study of school and college students suggests that the education that Scheduled Caste and Scheduled Tribe students receive does not seem to be particularly effective in changing their attitude to caste or to authority in promoting their awareness, in encouraging their politicization or in any way developing qualities that are likely to equip them to make an effective bid for change, mobility, and power. In spite of having had high school and college education, the students covered by the study have a limited exposure to mass media, a poor level of politicization, and are not fully aware of the facilities and opportunities open to them. They continue to believe in caste endogamy and to be generally conformist in their attitude to life. If the position of the Scheduled Castes and the Scheduled Tribes is to be changed it is necessary to remedy this situation and to ensure that the education that students from these groups receive equips them to make an effective bid for mobility and change.

In order to promote the occupational advancement and economic uplift of the Scheduled Castes and Scheduled Tribes, it is necessary to ensure that the content of learning is such as to equip them for more effective farming, fishing, forestry, raising of livestock, pottery, basketwork, weaving, or any other occupations in which they can be productively involved. It is particularly necessary that the knowledge imparted to them adequately covers concerns such as the obtaining of raw materials, conservation and storage of products, and marketing. Some efforts in this direction are already being made in the State under what are described as programmes of nonformal education.

These programmes need to be made much more extensive and to be more systematically organized with a view to improving the lot of the poor and the underprivileged.

In order to make it possible for children from disadvantaged homes to attend school regularly and to complete their school careers, it is necessary to ensure that school timings are better suited to fit in with their other obligations. It is necessary, further, to ensure that children who for some reason or another lag behind others in the class are assisted to catch up and maintain their pace. In order to obtain this objective it may be necessary to introduce major changes in the manner in which school programmes are conducted, school work is evaluated, and school discipline is maintained. It is also necessary to examine and reconsider scholarship and free-studentship schemes and to design strategies to ensure that children from poor homes are not required to draw upon parental support for their education. Since funds for the support of disadvantaged children will always continue to be in short supply, it will also be necessary to devise programmes to ensure that schools and colleges do not merely remain units of consumption but become, to some extent, at least economically productive.

IV. NEED FOR ACTION

WHILE FORMAL SCHOOL AND COLLEGE EDUCATION in the State needs to be reformed as suggested above, the entire concept of education for the Scheduled Castes and Scheduled Tribes in Maharashtra needs to be reviewed very carefully. During the past two or three years thinkers on education in India have expressed serious doubts about both the feasibility of universal primary education and the effectiveness of formal education, as presently structured, in bringing about the political, economic, and social transformation required.²¹ They have argued that neither the failure to provide universal, free, and compulsory primary education in the country nor the failure to gear education effectively to the needs of development can be remedied unless the organization and structure of education are drastically

²¹ Prominent among those who have been pointing out the limitations of formal education in India is Mr J.P. Naik, see his *Elementary Education in India: A Promise to Keep* (1975); *Equality, Quality and Quantity: The Elusive Triangle in Indian Education* (1975); and *Some Perspectives on Nonformal Education* (1977), all published by Allied Publishers, New Delhi, for the Indian Council of Social Science Research in the "Alternatives in Development" series.

changed to accommodate the masses and to suit the needs of development. The changes that have been suggested at some of the recent seminars and discussions on nonformal education²² in the country are so far-reaching that they could be described as radical changes in the entire structure of the system of education rather than as reforms.

For instance, the work of Godavari Parulekar among the Warlis as well as the work done by social and political workers among the tribals of Dhulia district suggests that if the tribals of Maharashtra are to be educated to liberate themselves from bonded labour and indebtedness, it may be necessary to postpone literacy and numeracy in their education and accord priority to programmes that make them aware of their existing situation, conscious of their rights, and knowledgeable and confident enough to fight for their legal rights. Similarly, several of the programmes for nonformal education that are being conducted for the disadvantaged in the State suggest that it is urgently necessary to equip the disadvantaged, and as such the Scheduled Castes, with skills that are either immediately relevant to gainful employment or to more efficient production in the occupations that they may already be involved in. They also suggest that it is necessary to inform those who are disadvantaged about the rights and the facilities available to them to equip them to organize themselves to assert these rights and utilize the opportunities available. Whether action in the direction of the reorganization of education to fulfil these needs will be looked upon as a movement towards nonformal education, or whether the concept of formal education will be expanded to accommodate the new needs in learning, is immaterial. What is important is the action. The State of Maharashtra which has been considered to be in the forefront in education could launch a major change and development in the country if it takes up the issue of the education of the Scheduled Castes, the Scheduled Tribes, and other disadvantaged sectors of the State in this vein.

²² Proceedings of the State Level Seminar on Non-formal Education organized by the Indian Institute of Education, Poona in March 1977.

I. P. Desai

Education of the Scheduled Castes and Scheduled Tribes in Gujarat

Introduction

THE STUDIES OF THE EDUCATIONAL PROBLEMS of the Scheduled Castes and the Scheduled Tribes of Gujarat as also of the rest of India are by and large those pertaining to the special facilities and assistance provided to these students. It is inquired whether these facilities and assistance are adequate or inadequate, whether they are properly administered, and how and by whom they are utilized. The results are generally measured by the spread of literacy and levels of literacy. Sometimes it is also asked whether the special facilities and assistance have served the purpose they were intended to.

The idea behind the special educational steps taken to encourage education among the Scheduled Castes and the Scheduled Tribes was that education would prepare them for utilizing the new opportunities of employment, improve their social status, and lead them towards greater equality with others in the wider society. In general terms it is said that education would bring them into the mainstream of Indian society, though the mainstream is rarely made specific.

It might be said that by and large they are policy-oriented questions. They are not less useful on that account for what are called theoretical or practical purposes. That is one line of inquiry and it is not intended to examine it here. What is suggested in this paper is that we need to go a little further and deeper into what are called special problems faced by the Scheduled Castes and Scheduled Tribes in education.

The suggestions for going further and deeper come from these studies only. It is found in almost all these studies that the facilities are

differentially utilized by different Scheduled Castes and Tribes. This fact is not controverted. But opinion differs regarding the inference that those who are better off among the Scheduled Caste and Scheduled Tribe groups take greater advantage of these facilities than the "weaker" among them. Our first suggestion is that this question can be studied satisfactorily by the study of individual castes and tribes and not by taking the entire Scheduled Castes and Scheduled Tribes in any State. It is necessary first to establish that social differentiations exist among the different Scheduled Caste and Scheduled Tribe groups. That would lay down the basis for a study of the stratification among them. The stratification may be incipient. But if the bases are the same as in the rest of the Indian society and if we are able to relate them to various educational problems of the Scheduled Castes and Scheduled Tribes, we shall have a common frame of inquiry for the Scheduled Tribes, Scheduled Castes and the rest. We do not have many such studies of non-SC, non-ST groups either.

It is against the background of such thinking that we examine some data on education among the Scheduled Castes and Scheduled Tribes in Gujarat.

In the following section we shall examine the data on the Scheduled Castes and in the next section, we shall examine the data on the Scheduled Tribes.

The Scheduled Castes

IN 1971 THE SCHEDULED CASTES in Gujarat numbered 1,825,432 in a total population of 26,697,475. They were 6.84 per cent of the total population.

There are about 25 Scheduled Castes listed in the Census. But nearly 85 per cent of the total population is made up of four castes. Of them Mahyavanshi, Dhed or Vankar are 41.10 per cent, Bhambhi Chamar, Khalpa or Rohit are 22.75 per cent, Bhangi, Mehtar or Rukhi are 12.75 per cent, and Meghwal are 8.17 per cent. The remaining 15 per cent are distributed over about 20 castes.

Of the four major castes mentioned above the Mahyavanshi have the literacy percentage of 33.48.¹ It is near the all-Gujarat general literacy percentage of 35.9 and about 6 per cent higher than the all-

¹ The literacy percentage of particular Scheduled Castes and Scheduled Tribes and of other groups are worked out from District Handbooks of General Census 1971.

Gujarat Scheduled Caste literacy percentage of 27.7. The Bhambhi, the next most numerous caste, has 26.29 per cent literacy which is near the all-Gujarat Scheduled Caste literacy. The third most numerous caste, the Bhangi, has the literacy percentage of 21.13. It is only 5 per cent less than that of the Bhambhis, who are a little less than twice as numerous as the Bhangis. The Meghwals who have a little more than a half of the population of Bhangis have 12.54 per cent literacy, the lowest among the numerically major castes.

The literacy percentage is not related to the size of the caste. The Garodas, who are only 45,788 in number, are 2.5 per cent of the total Scheduled Caste population but have 46.72 per cent literacy, the highest among all Scheduled Castes. It is more than the general all-Gujarat literacy rate of 35.7 per cent. It may also be mentioned that it has 64.38 per cent male literacy, which by itself is a high percentage even for a non-SC, non-ST group in Gujarat.

Similar is the case of the Turi who are only 11,834 but have a 34.44 per cent literacy and 50.39 per cent male literacy. It may also be mentioned that 70 per cent of the Garoda and 84 per cent of the Turi population are rural.

The point to note is that though the general Scheduled Caste literacy is about 8 per cent less than the general State literacy, the literacy achievement of one caste is near it and of another higher than it. Of course, there are rural-urban and male-female differentials. They are so in the case of the general population also. But in the case of the Scheduled Caste population it may be pointed out that only 27.25 per cent of it resides in urban areas and in none of the high literacy Scheduled Caste groups except the Garoda, is it higher than that. The Garodas are only 2.45 per cent more in urban areas than the total Scheduled Caste population. The other small group significant from the point of view of urban residence and literacy is the Nadia or Hadi. Its total population is 22,077. Nearly 39 per cent of them are urban residents and literacy among them is 31 per cent while rural literacy is only 14 per cent. Literacy for the entire group is 20.49 per cent. It cannot be denied that urban residence has an advantage over rural for literacy achievement. In the case of each Scheduled Caste group, the urban literacy percentage is higher than both the rural and the general literacy percentages of that group. This fact could be interpreted to mean that in the case of each Scheduled Caste, literacy and educational achievements among the urban residents will give rise to a crust and subsequently a stratum of literates and educated, or an

urban elite if we may say so. The process is similar to that among the non-SC, non-ST groups with all its correlates, corollaries, and consequences. These elites will also be from certain castes to begin with, which it is pertinent to note will not necessarily be the most numerous castes as we have noted above. That is also what happened and is happening among the non-SC, non-ST castes in Gujarat and probably in India.

We need not go into further considerations of this point. Our aim was to show that the Scheduled Castes are not a homogeneous category and it will be more fruitful to study each Scheduled Caste. Second, we wanted to show that what is happening to each Scheduled Caste is not qualitatively very different from what happened to the non-SC, non-ST castes. What our data indicate is that a sort of stratification based on the same elements as among the non-SC, non-ST castes is taking place. At the same time, it may be added, it is also strengthening the caste sentiment among the Scheduled Castes as among the non-SC, non-ST castes.

The second point which we wanted to make was that with literacy and educational differences within each caste and between castes, there is the possibility that along with other differentials there might be economic differentials. Some may be better off, some others may be not so well off but also not so poor, and the rest may be poor. If that is so, it could also be expected that educational achievements and their correlates might also differ accordingly: the better-off may have better literacy and educational levels and occupational positions, life style, aspirations, etc. We said that we should have direct evidence on that point, but we do not have it at least in the case of the Scheduled Castes. Studies of particular Scheduled Castes will be necessary. We have such evidence for the Scheduled Tribes which will be presented in the next section. But before we do that, it may not be out of place to mention similar evidence from another study collected from recorded data.

Vimal P. Shah and Tara Patel in their study of post-matric SC and ST scholars² write: "It is often mentioned that benefits of the government assistance for higher education accrue mostly to the children of the privileged families among Scheduled Castes and Scheduled Tribes. If we were to view white-collar occupations as indicating the privileged families among them, the data of this study

do not support this hypothesis, especially with regard to male scholars." It is therefore likely that a larger percentage of poor Scheduled Caste students are able to go to college due to the scholarships. It is irrelevant for us here to support or to oppose that position.

However, in the same study it can be observed (Table 7-3 on p. 154) that the percentage of average high SES increases to 24.9 in 1971-72 from 22.2 in 1967-68. It is also noteworthy that the percentage of Scheduled Caste scholars having an annual income of Rs 2,000 plus increases from 33.9 to 44.0 in 1971-72. The percentage of scholars with urban residence increases from 39.8 to 47.8 during the same period. We are not concerned with the significance of these data for the purpose of the hypothesis mentioned by the authors. But they do indicate the existence of an urban, higher-income, educated layer among the Scheduled Castes. But we would wait until we have positive evidence from the study of particular castes.

The Scheduled Tribes

THE TOTAL POPULATION of the Scheduled Tribes in Gujarat in 1971 was 3,453,560. It is nearly 14 per cent of the total population of Gujarat. Of these 96.62 per cent were living in rural areas and 5.37 per cent were living in urban areas. The literacy of the total tribal population was 14.42 per cent. Male literacy was 22.30 per cent and female literacy, 6.31 per cent.

There are 28 tribes listed in the Census. But nearly 15 of them are each less than 1 per cent of the total tribal population. Of the major tribes in 1971, 37.86 per cent are Bhils, 10.95 per cent are Dublas or Halpatis, 10.11 per cent are Dhodia, 7.79 per cent are Gamits, 5.31 per cent are Chaudharis, 3.82 per cent are Dhankas, 5.11 per cent are Konkans including Kunbis, 6.51 per cent are Naikas or Naikdas, etc., 5.43 per cent are Rathawas, 3.55 per cent are Warlis, and 1.39 per cent are Patelias. They make up about 97 per cent of the total tribal population. They reside in the hills and the jungle areas of the eastern and north-eastern parts of Gujarat. They are distributed over 7 districts – Dangs, Valsad, Surat, Bharuch, Vadodara, Panchmahal, and Sabarkantha.

Now as in the case of the Scheduled Castes, among the Scheduled Tribes also there are tribes which are above the total tribal literacy percentage of 14.42. Some are near about it and some are below it. The highest literacy percentage is 31.18 among the Dhodia followed

by the Chaudharis with 22.03 per cent and Patelias with 18.81 per cent. The Dhankas have 16.64 per cent literacy. The Gamits have 14.84 per cent literacy, which is near the general tribal literacy. The rest of the tribes such as the Bhils, the Dublas, or the Halpatis have each 1 per cent and the Konkans have 2 per cent less than the general tribal literacy percentage. The rest have more than 2 per cent less than that.

Unlike the Scheduled Castes, none of the Scheduled Tribe groups is above the State literacy percentage. Only one group, namely, the Dhodias, are near it with 31.18 per cent literacy. The rest are far below the State average. Even then the same phenomenon as among the Scheduled Castes is observable among them. Different tribal groups differ among themselves in literacy percentages. The difference between Dhodias, who have the highest literacy percentage (31.18), and the Chaudharis, who have the next highest percentage, is 9 per cent.

Thus, as in the case of the Scheduled Castes, the Scheduled Tribes too at least with reference to literacy are not a homogeneous group. Also, the difference in terms of occupation and income could be expected. In other words, the differences between tribes could be explained with reference to the structural elements. Moreover, as we expected in the case of the Scheduled Castes, we could expect that within each tribe also differentiations on the same bases might be taking place. But we could say that more confidently if we had data on these different groups. In the case of the Scheduled Tribes the literacy percentages are so low that we are not easily led to believe that internal differentiations might have taken place within each tribal group. Fortunately we have data on one tribe, namely, the Chaudharis, in the Surat district. Ghanshyam Shah in a restudy of Chaudharis³ has collected such data. He observed 21,506 individuals in 3,347 households. He classified the households into four groups – labourers, poor peasants, middle peasants, and rich peasants. It should be said here that the terms "poor", "middle", and "rich" are to be understood in the context of the hill and forest areas. His findings are as follows:

Every second literate Chaudhari has only primary education. Only 4 per cent Chaudharis have secondary education. Only 2 per cent of

³ *Socio-Economic Changes Among the Chaudharis* (Mimeographed). Surat, Centre for Social Studies, 1977.

them have college education. Stratum-wise, 1 per cent each of labourers and poor peasants out of the total number of 7,641 persons respectively have college education, while 2 per cent middle peasants out of the total 8,243 persons and 6 per cent rich peasants out of the total 1,555 persons have college education. There appears to be a significant association between the levels of education and strata. He has calculated the chi-square.

There is an indirect corroboration from the study of post-matric scholars by Vimal P. Shah and Tara Patel referred to earlier. As in the case of the Scheduled Castes, among the Scheduled Tribes also between 1967-68 and 1971-72 the percentage of high SES of post-matric scholars has gone up from 20.1 to 24.4. With reference to individual indicators such as annual family income of Rs 2,000 plus, owning a house and holding 5 acres of land, the increases are between 5 and 6 per cent. Only, in the case of white-collar fathers the percentage has gone down by one.

Such evidence leads us to the view that not only between different Scheduled Castes and Tribes but also within each Scheduled Caste and Tribe, social differentiations are taking place on the same secular bases as among the non-SC, non-ST castes. It is suggested that it would be more fruitful if our empirical studies are carried out caste-wise or tribe-wise and if social differentiation and stratification within each caste or tribe is observed and if educational attainments are related to them.

VIMAL P. SHAH AND TARA PATEL observe that the opinion that the advantage of government assistance has been taken more by the better-off than the poor among the Scheduled Castes and Scheduled Tribes exists. But their study of the post-matric scholars does not lend support to it. Our concern at the moment is not to examine their view or the opposite view. But it is necessary here to point out the dangers that might follow from the former view. It could be argued that since our aim is to reduce inequalities, education with government assistance is working contrary to that ideal; therefore, steps should be taken to see that it does not happen that way.

There are two points here. One is that of the relation between education and stratification. So far as this point is concerned, it is true that such a relation exists in all societies and also in the non-SC, non-ST part of the Indian society. Why should stratification among the Scheduled Castes and Scheduled Tribes be frowned upon? As a

matter of fact, such stratification is one of the processes by which they are changing and becoming a part of what is called the mainstream. Stratification seems to be a universal feature of human society, though its bases may differ from society to society and from time to time in the same society.

The second point is, should a government wedded to the ideal of reducing inequalities increase them by its policies? Thinking of this kind would have been valid if the Scheduled Castes and Scheduled Tribes had the advantage of equality at start with the non-SC, non-ST groups. Scheduled Caste students were permitted to sit with the others in the same class only after independence. Between 1961 and 1971 Scheduled Caste literacy increased by 5 per cent from 22.46 to 27.7, while the non-SC, non-ST literacy increased by 6 per cent from 34.2 in 1961 to 40.3 in 1971. The corresponding increase for the Scheduled Tribes is 2.5 per cent from 11.7 per cent in 1961 to 14.2 per cent in 1971.

The above figures are instructive. The difference in the rate of increase of literacy during the last decade between the Scheduled Castes and the non-SC, non-ST castes is only 1 per cent. But the total literacy achieved by the former is 27.7 per cent and by the latter 40.3 per cent. While the rate of increase indicates that the Scheduled Castes are catching up with the non-SC, non-ST, it also points to the slow rate of growth among the non-SC, non-ST, groups. Even at that slow rate if the Scheduled Castes have to catch up with the non-SC, non-ST in general literacy, it will not take less than two decades for the Scheduled Castes, assuming that the rates of growth for both the groups are equal. It cannot be denied that so far as Scheduled Caste literacy is concerned what is achieved is not inconsiderable, and that government measures have helped them in that achievement. But what remains to be achieved is quite considerable.

So far as the Scheduled Tribes are concerned the rate of growth of literacy during the last decade is half of that of the Scheduled Castes and their achievement of total literacy is also not impressive. It will take several decades for them to catch up with the Scheduled Castes, and the non-SC, non-ST groups. Therefore, greater efforts for the growth of literacy among the Scheduled Tribes are necessary even if education creates inequalities among them. It will be a sad mistake if the growth of inequalities due to education is put forth as a ground for limiting educational facilities to the Scheduled Tribes.

From the point of view of the utilization of educational facilities, the

case of the non-SC, non-ST groups is highly relevant. What our figures tell us is that among 80 per cent of the population there is only 40 per cent literacy. Is the achievement really creditable? What happens to the growth in facilities in terms of schools and assistance in terms of free education? The utilization of these facilities and assistance seems to be inadequate. A large part of the illiteracy percentage is still made up by women and rural illiterates.

From our point of view stratum-wise observation will be important. We will have to fall back upon castes. It will not be unreasonable to presume that there might be one hundred per cent literacy among the two or three higher castes in every region or district. After independence education has also percolated to what are generally called the intermediate and other artisan castes.

Now those higher and intermediate castes are not more than 50 per cent of the population. Our argument is that there is nearly 40 per cent out of the 80 per cent non-SC, non-ST population consisting of castes lower than the above groups. Illiteracy must be higher among them. We have preliminary information from six districts in which the tribal population is in considerable number. The details for other districts are under tabulation. In one district the non-SC, non-ST literacy is 61 per cent. In another it is 60 per cent. In the fifth district it is 35 per cent and in the sixth it is 32 per cent. Who are these non-SC, non-ST illiterates varying from 40 to 68 per cent in different districts? They are not untouchables or tribals. They must be economically handicapped. Even among the intermediate castes there are economically and occupationally lower strata and they might form the bulk of illiterates. Caste-wise, religion-wise, and district-wise studies are necessary to verify this view.

A rider to the above view may be added here: if one hundred per cent literacy is achieved in a caste or group of castes what relation does it bear to strata within it? It is likely that in their cases the levels of literacy might differ with differences in strata.

We have been emphasizing stratification as an explanatory variable. It affords a perspective to see both the achievements and failures in literacy and levels of education. Moreover, we are enabled to perceive the progress of education in special groups in the same terms as for the whole society. We can also relate education in other aspects of society such as political power. We can relate it to the change in the Scheduled Caste and Scheduled Tribe groups and in the non-SC, non-ST groups.

Are we then suggesting that the study of special problems of the Scheduled Castes and Scheduled Tribes as it is being done in Gujarat be given up? Some will still remain. Second, is stratification studies all that we mean by going behind the word "special"? In the case of the Scheduled Castes' problems, largely yes. In the case of the Scheduled Tribes' problems, definitely no.

The special problems of the Scheduled Castes arose out of untouchability. In an independent inquiry into untouchability in 69 villages spread all over Gujarat, the conclusion arrived at was that at the primary school level untouchability did not come in the way of Scheduled Caste education.⁴ So also at the secondary and college levels the Scheduled Caste student is not discriminated against. In this regard the jealousy and rivalry between the Scheduled Caste and non-SC, non-ST groups and the consequent incidents need to be explained. But the question how much of the jealousy and rivalry can be explained in terms of untouchability and other reasons cannot be dealt with here. But as we have said, the Scheduled Castes are likely to catch up with the non-SC, non-ST groups in literacy, and at least for a decade more special assistance is not only necessary but should be intensified.

The problems of the Scheduled Tribes arise out of both their geographical and social locations. They were and still are in the hills and jungle areas. They were geographically and socially isolated from the rest of the society. Whatever contacts they had with their surrounding society were not conducive to their educational development. In the past the exploitation consequent upon contact was open and uninhibited. Now the contact is greater and the exploitation is regulated by the rules of the economy and the polity of the Indian society. Also, the exploiters are not necessarily non-tribal; they are also tribals and to that extent the tribal society is integrated with the larger society. Yet the difficulties of transport and other communications and their attachment to land and agricultural and forest occupations still keep the large mass of Scheduled Tribes in their areas which are changing but not much to their advantage. These characteristics still give a special character to the educational problems of the Scheduled Tribes.

4 I.P. Desai, *Untouchability in Rural Gujarat*, Popular Prakashan, Bombay, 1977.

A. R. Kamat

Education and Social Change

MUCH SPREAD OF EDUCATION has taken place in India at all levels during the post-Independence period.¹ This spread of education has helped to bring about considerable social change. This essay deals with some of its salient aspects in which the spread of education has played an important role. While the observations in their generality will be applicable to India as a whole I have drawn for illustrations from what has happened or is happening in Maharashtra.

THE INITIAL DIFFICULTY in this connection is that of definition. The word social has such an all-embracing connotation that it can include almost every aspect of human life. For man can only be viewed as man in society; hence everything human is at the same time social and nothing can be human unless it is at the same time social.

Now some consequences of education which have great social significance are of a fairly general character; that is, they hold for all sections of society. Consider, for example, the effect of education in one generation on the educational aspirations (and also the efforts for their realization) in the next generation. It is well known that a father ordinarily desires that his sons should be educated at least up to, if not further than, the stage to which he was himself educated. Similar is the desire of a mother in respect of her daughters. The importance of these

social tendencies, prevailing in almost every section of society in India, is obvious for further spread of education and also for attaining higher and higher levels of it from generation to generation. It has, in particular, great significance for the spread of literacy among weaker sections, which I have elsewhere described as the law of compound interest in the case of women's literacy.²

Another important consequence in the case of spread of education amongst women, especially if they reach the secondary or higher level, is that it invariably results in their adopting a small family norm. This is due to both the appreciable increase in their age of marriage and a strong motivation for limiting the number of children and their spacing. This has been particularly noticed in Kerala where women's education has made considerable progress and also in our urban population where there is relatively more of education among girls. There are of course other concomitant factors involved in this, one of great importance being the independent (white-collar) employment of women, which again is a function of education.

To take another example and in yet another field, it has been found in a number of village surveys that farmers who have completed elementary education tend to be more conversant with modern agricultural practices. The higher the educational level, the greater is the adoption of these modern methods. In general, there is a fairly marked association between educational level and agricultural productivity.

Thus it will be seen that a wide variety of change in the work and life of the people can be at least partially traced to the spread of education. It is not my intention, however, to open the theme that wide open. For the purpose of this essay "social change" will be so interpreted as to cover mainly the changes that are taking place in social stratification, in the relative positions of different socio-economic sections in our society and their mutual relationships; other aspects, if any, will be mentioned only incidentally.

Again, in order to avoid a needless controversy because of the title of the theme, let me clarify at the outset that education is not the only factor, nor always the main factor, which brings about social change. Undoubtedly changes in the economic structure, in the political power structure, the legal structure, etc., are the mainsprings of change in the social hierarchy and the relationships between different sections in it.

¹ A critical review of educational development in India, and its social analysis will be found in A.R. Kamat, (i) *The Educational Situation and Other Essays*, People's Publishing House, New Delhi 1974, and (ii) *Education after Independence: A Social Analysis*, Lala Lajpatrai Memorial Lectures, Lala Lajpatrai Institute, Bombay 1975. The present essay is in fact a modified version of the third lecture in (ii). Also see in this connection: J.P. Naik, *Equality, Quality and Quantity: The Elusive Triangle in Indian Education*, Allied, New Delhi, 1975.

² *The Educational Situation, etc., op. cit.*, "Women's Education in Rural Areas"

All these factors including education are interrelated and interact, and it is difficult to separate out the effects and say that a particular aspect of the change is attributable to education alone. But the history of the past century and a half of the socio-economic development in India clearly shows that the spread of education has played a crucial role in this development. It has been observed that education generally raises the earning potential and income, it increases occupational and regional mobility, and it enhances social status. Education has also helped to strengthen economic and political power at various levels. This not only holds for individuals but also for social groups. And for those who belong to the lower and poorer sections of society such as the Scheduled Castes, Scheduled Tribes and other backward communities, education has been perhaps the only means of getting out of the vicious grip of indigence and backwardness and of elevating themselves along the economic and social ladder. The spread of education to wider and wider sections of population has thus brought in its wake changes in social stratification.

THIS HAS BEEN A CONTINUOUS PROCESS and in order to appreciate better the development of the post-1947 period it is worth while having a brief look at the past. The extremely limited facilities for Western education provided by early British rule, say, up to the nineties of the last century, were availed of mainly by the upper castes and advanced social groups of Indian society. This was more so in the case of higher education and, in particular, of professional higher education which became the preserve of the more affluent among them. This newly educated elite occupied all available professional and white-collar positions, particularly in the civil service at its various levels which was then by far the main avenue for employment. True, under British rule, the doors of education opened for the first time, at least formally, to all sections of society and because of this a small number from the middle castes in the social hierarchy, and a still smaller number from the lowest castes including the untouchables, could elevate themselves and take up literate occupations including government service.

The new English-educated intelligentsia naturally faced the difficult task of ideological adjustment between the old heritage and the new learning, discovering in the process a new national identity. The problem was that of the old cultural thought coming to terms with the new currents of modern Western learning and the political realities of

the dependent colonial status. The transition from a status-bound, more or less rigid caste society to one consisting of at least formally equal individuals, from the old largely village-based economy to the monetized colonial capitalist economy, from feudal rule to bourgeois rule of law, from the old culture to a culture based in rationality, science and technology is long and difficult, and full of conflicts and contradictions. The old society very often accepts the form and immediate trappings of modern learning, but finds it difficult to assimilate its core of thought and values such as rationality, empiricism, and induction. In other words, it partially opts for the new value system and comes to some sort of compromise and ad hoc adjustment with it. Indian society was faced with this problem at its first confrontation with Western learning a century ago under conditions of colonial dependence. That process of adjustment together with the social schizophrenia which it involves still continues with us.

Moreover, Indian society was divided into several social groups or communities on the basis of religion and caste, each one of which had to go through this process of adjustment, to discover itself anew, with the spread of education. The process accelerated in the period between the two World Wars when education spread further and because of the militancy and mass character of the national struggle for independence. And it continues after Independence with the much greater spread of education.

For instance, in Maharashtra one can discern three distinct, but not unconnected, strands in this process of the spread of education and the resulting social change, in the social and political awakening among different sections of society. First, there was the predominantly urban strand of the upper castes represented by Ranade, Tilak, Gokhale and others. Second, there was the predominantly rural strand (but led by an urban leadership) of the middle and lower castes represented by Phule and the Satya Shodhak Samaj, and the later non-Brahmin movement. The third strand in this process was that of the untouchable castes led largely by Ambedkar. Education and the consequent discovery and realization of self-identity came to these three broad caste groups in three successive stages, although one has to remember that at any given time there was always some education and therefore some sort of social awakening in all the three groups. The first, starting about 1850, matured during the next forty to fifty years; the second started about 1880, made significant advance in the

period between the Wars and is actually coming to fruition in the post-Independence period, particularly after the formation of the State of all Marathi-speaking people; the third had its beginnings in the twenties of this century, made some headway in the thirties and forties and is still grappling with the problem of finding a place of its own. This is the broad outline of social developments in Maharashtra which started with the establishment of British rule. It should be possible to think of similar analyses of developments in other parts of India, although the chronology and the social composition of various strands will be different.

Let me now consider the formation of the new educated elite in our society. With a more rapid pace in its spread education began to acquire a mass character for the first time during the twenties and thirties. It now reached new strata lower down the social hierarchy. They avidly took to education because for them as individuals or for their communities, education appeared to be the sure, and perhaps the only means of improving their economic condition and acquiring social prestige. This resulted in the formation of a small but significant core of a newly educated elite among the middle castes and a similar process was operating, but on a much smaller scale, among the castes on the lowest rungs of the social hierarchy – the untouchables. Simultaneously the widening of political franchise during this period also made them aware of how political pressures could be built and the limited political power could be used towards realizing socio-economic advantages for their respective communities. They became more and more conscious of the importance of bringing educational facilities to their communities for achieving these objectives. The prospect of an imminent transfer of power and the acceptance of the principle of adult franchise strengthened the process during the thirties and forties.

But as mentioned before, the real push forward towards “democratization” of education could come only after Independence, after the democratization of the political set-up in the country. This has brought about fundamental changes in the composition of the educated classes and hence in the composition of the rural and urban elite formations. The wider spread of education and the exercise of political power at different levels have combined to produce far-reaching changes in our social set-up. Many shrewd observers of the developing social situation such as the late Professor D. R. Gadgil had

foreseen this process of change from the forties onwards.³

LET US FIRST SEE what has happened in rural areas. In the old days education, particularly beyond mere literacy, was mostly confined to the advanced castes – e.g., the Brahmins, the Kayasthas, etc. – to whom therefore the village population naturally looked up as its leaders and spokesmen. Now the situation is entirely different. The rural elite consists primarily of the educated youth of the middle castes and land-owning communities. The educated new generation of the landlords and rich peasants dominates the political, social, and cultural life in villages and small towns. They have rapidly extended their influence to district places and are trying to extend it further to the metropolitan centres. Adult franchise has helped these middle strata of the old social hierarchy to occupy strategic positions in political and social life at the village level, through taluka and district levels, to the State level. They strengthen their positions in these spheres with the help of education and they utilize these positions to advance their educational interest in secondary and higher education, to further enhance their earning potential, occupational opportunity, political strength and social status. The other affluent sections in rural society such as the trading communities have become close collaborators of this land-owning rural leadership in this process.

What about the sections of society further down the traditional social hierarchy in the rural population – the Scheduled Castes, the tribal population, and other backward classes? Thanks to the educational concessions placed at their disposal the benefits of the “democratization” of education have undoubtedly trickled down to them, though to a much lesser extent. A new educated elite is taking shape also among them but it is not sizable enough except in States like Kerala, Maharashtra, and Tamil Nadu. On the other hand, they are unable to join the main rural elite socially or economically on equal terms. Moreover, because of their smaller numerical strength, adult franchise does not help them much but for the constitutional provisions giving them safeguards and separate representation. Thus they can only play the role of a very junior and often vulnerable partner to the main rural elite, or act as a pressure group, at the political level and can participate even less in rural social life.

3 *Collected (Marathi) Writings of Professor D.R. Gadgil*, Vol. 2, part 5, Gokhale Institute of Politics and Economics, Pune, 1974.

What about the old elite belonging to the advanced castes (e.g., the Brahmins, etc.) which occupied most of the important positions in rural and urban society during the pre-Independence days? In both rural and urban areas they were an insignificant minority so far as numbers were concerned. With the rise of the new rural elite in much greater strength they had lost much of their social prestige, and most of their influence in rural politics and social life. This process was accentuated by their migration in sizable numbers to cities and towns in virtue of their occupations, and also because of tenancy enactments in the case of non-cultivating landowners amongst them. Thus in rural areas they now have an insignificant role and influence, which are also dwindling in small taluka-level towns. Because of their tradition of education and entrenched positions in the former period, however, they manage to find themselves professional and other literate occupations and white-collar jobs, which are mostly urban and semi-urban in government service and more so in the expanding private sector. But even in the urban and semi-urban employment their former near-monopoly no longer exists; it is being systematically eroded by the emergence of the new educated elite of rural origin of the middle castes and because of the decisive shifts in political power.

THERE HAS ALWAYS EXISTED an elitist channel in our educational system, providing prestigious high-quality education for the small affluent class in society. This elitist sector in education has considerably expanded during the post-Independence period, and has decisively influenced the formation of the educated classes in the present period as well as the continuation and shifts in the old elite. The more affluent and the more ambitious among the old elite now use the elitist educational channel, expensive English medium schools and select prestigious institutions of higher learning (the IITs and the IIMs) in India and abroad. After Independence and the considerable industrial development during the three Five-Year Plans new opportunities for highly paid situations became available in significant numbers in the form of senior positions in technology, industrial and business management, trade, the professions, defence services and also in the civil service which has considerably expanded during the past three decades. Thus there has formed, for want of a better name, the "super" elite of the present era, a sort of continuation of the microscopic anglicized section of the former educated top elite, but qualitatively different. They do not wield direct political power, but

because of their strategic positions in the economy and in the state apparatus, they exercise considerable influence on the actual exercise of political and economic power. Consequently they set the norm in social and political thinking as well as for social life and behaviour, for themselves and also for the lesser educated elite below them. The advanced elements of the middle castes which are relatively backward educationally and which have their base in the affluent peasantry have not been slow to recognize these new job opportunities and the elitist channel of education. The recently started "public schools" under government and private sponsorship (such as the sugar factories in Maharashtra) illustrate this trend. Thus elitist education and political influence at the State level facilitate their entry into the "super" elite, which they are trying to join in increasing numbers.

The major part of the old educated elite belonging to the upper castes, however, being less affluent and less influential, has inevitably to go through the cheaper educational channel of the indigenous variety, average secondary schools and ordinary colleges imparting instruction through the medium of the regional language. Their lot is to man the middle- and lower-salaried jobs, from professional, technical, and skilled to junior administrative and clerical and semi-skilled positions. Large sections of this old elite at the lower levels feel frustrated and resentful as they have lost much of their former social prestige and are no longer socially connected to those in positions of political power and governmental authority. Moreover, they have to jostle even for securing these lower jobs with the newly emerged sections of the educated from the middle and lower strata of society, often of rural or rustic origin, because the latter are socially well connected with the new ruling class. They (the old elite) find that the preference in selection for high and low governmental and semi-governmental positions, which was tilted in their favour during the major part of the pre-Independence period, is now tilted against them during the post-Independence period.

The new formations in the educated elite in India in the past 30 years are such an important element of social change that they deserve further discussion. The pre-Independence elite, belonging largely to the few advanced social strata, was more or less homogeneous. Although there were undoubtedly differences among them because of high and low social positions, except for the very small anglicized section at the top, they formed a sort of a continuous spectrum. No doubt there was social distance between the different

layers, unbridgeable in many respects, and also between them and the rest of the common people. But traditional social bonds and the prevailing strong anti-imperialist national sentiment – loud but often ineffective except at the peak periods of political movement – bound this educated elite together and also acted as links between them and the common people.

The situation today is entirely different. The “super” elite of today is even more alienated from and indifferent to the lot of the common people than its counterpart of the pre-Independence day. There is hardly any feeling of social commitment and their only interests are their professional or service prospects, that is money, career, influence and connections; and their social life, which is a life of the smart set, is a life of affluence with pseudo-Westernized norms of high society. A large section of them, coming from the now politically less influential but culturally dominant higher castes and groups, live in resentful reconciliation with their bosses who often belong to the socially less advanced sections. It harbours contempt or a sort of patronizing attitude towards them (the bosses) who lack knowledge and skills as well as social finesse which the “super” elite possesses in ample measure. Although the “super” elite is learning to make the necessary adjustments with the new situation arising from new power relations these feelings and attitudes still persist.

Below them is the common or “regional” elite educated in regional-language or the commoner channel of education. Within it is the vast lower salaried class which, in the face of rising prices and growing unemployment, finds it difficult to maintain its middle-class style of life. It has therefore to live a life of relative misery and frustration. Moreover, there is also the contradiction between its two broad sections: those coming from the traditionally-literate minority castes, having few social links with the present wielders of political power at different levels, and the newly emerged educated class from the middle and lower castes which have such connections.

THESE CHANGES IN THE COMPOSITION of the educated elite over the years is reflected in the composition of personnel at various levels in different sectors. Consider the political leadership at different levels. At the taluka and even district levels, for instance in Maharashtra, the positions of power and vantage such as the panchayats, the cooperative banks, the cooperative marketing societies, etc., are dominated mostly by the landowning middle castes (together with a

small number of the Scheduled Castes who have a statutory representation). The advanced castes except the trading and moneylending sections do not carry much influence at these levels.

It is interesting to see the change that has come over the leadership at the State level, e.g., in the composition of the State council of ministers after Independence. Here also there was a rapid change in the space of just a decade after 1947, and particularly after the formation of the Maharashtra State, although some representatives from the advanced castes continue to find a place to meet the requirements of the urban interests. It is very unlikely that the chief ministership of Maharashtra will go to them (or to the Scheduled Castes) in the foreseeable future. The main factor responsible for this change in the political field is of course political, that is, the “democratization” of politics, but the democratization of education has hastened and strengthened this process of change.

In Maharashtra this process of change is clear enough, and so is it in Tamil Nadu (e.g., Kamaraj became chief minister in 1953). But other States also show the same trend although not in such a sharply linear manner. This direction of change is not so pronounced at the all-India level of politics, but there also it is no longer imperceptible. The social analysis of the composition of the Central Council of Ministers from 1947 supports this view.

A similar analysis of the existing position and new recruitment in Central and State government civil services, before Independence and now, also demonstrates this process of “democratization”, more pronounced at the State than at the Central level, and even more so at the district level. Here, two things stand out. First, the advanced castes still numerically dominate the civil services particularly at the Class I and Class II levels both in the existing composition and in the new recruitment. But the composition at the Class III level is changing rapidly where the middle castes and the educated youth of rural origin are finding employment in large numbers. The Class IV level jobs were all along manned by the middle and lower castes, and this continues except that now the Scheduled Castes and the tribals and other backward castes also claim a significant share at this level. In fact it is repeatedly pointed out in the reports of the Commissioner for Scheduled Castes and Scheduled Tribes that these weaker sections of population are extremely underrepresented in the Class I and Class II services and their share in the Class III services is relatively greater but much below their percentage in the population. On the other hand,

they are "over-represented" in the Class IV services! The respective percentages a few years ago for the Scheduled Castes were of the order of 2, 3, 7, and 18 in the class hierarchy as against their strength of 15 to 16 per cent in the population, and there is no reason to believe that the situation has changed much during the past few years.⁴

The situation in the public sector and autonomous corporations such as the banks, the LIC, and public sector industries is not very different, but it is my impression that the "democratization" trend is operating there at a much slower pace. But at higher levels in the public sector undertakings there is much regional mixing in new recruitment as in the case of Central Services. This is even more so in defence services. Such regional mixing is also much in evidence in the case of private sector establishments in industry, business and trade, particularly in the higher reaches of technology and management. Lower down, the composition of the staff is in this case much affected by the social biases and preferences of the management and ownership which inevitably operate, and have been traditionally operating, in individual enterprises.

It is interesting to analyse the situation in the staffing of educational institutions. This is a fairly large sector of employment, of the order of three million, if one takes together all stages of education from elementary schools to colleges and universities. In the elementary schools which are mostly run by the State government, either directly or through the Zilla Parishads, the middle, lower and even the lowest sections of the caste hierarchy are now well represented and their share in the new recruitment is increasing. In Maharashtra, for instance, this is one sector (along with Class IV jobs in government and local government offices) where the Scheduled Caste candidates find employment relatively easily, particularly those who have had high school education with or without the S.S.C.⁵ This fact is significant because it well illustrates how the process of social selection operates through education wherein the lowest in the social hierarchy largely tend to occupy relatively similar positions in the next generation.

At the secondary and higher level most of the educational effort is

4 Relevant reports of the Commissioner for Scheduled Castes and Scheduled Tribes for 1969-70.

5 In studies undertaken by I.P. Desai of the Centre for Social Studies, Surat, it was found that in some districts of Gujarat about half the number of primary teachers belonged to the Scheduled Tribes.

in the hands of private managements. The social pattern of staffing and new recruitment thus naturally varies from management to management with their traditional and/or built-in biases and preferences. For instance, in Maharashtra, in colleges of long standing in Bombay, Pune, Nagpur, Nasik and elsewhere, the social composition of teachers will be overwhelmingly in favour of the advanced castes, mostly Brahmins and allied castes, with an occasional sprinkling of the middle castes. On the other hand, in the newly started colleges in smaller cities and towns there is an increasing complement of the middle and lower castes, the strategic post of the principal often being reserved for someone belonging to them. But as a general proposition one may say that the proportion of the members of the middle and lower castes in the collegiate staff is still modest, and that of the Scheduled Castes is negligibly small (except of course in the institutions started by the followers of Ambedkar). The reasons are: the number of qualified university-trained persons from the middle and lower sections is still not very large and the first preference of those among them who are qualified is always for the more comfortable and better-paid jobs in government and similar services.

The situation at the university level is still predominantly elitist in its social composition. This is largely due to the prevailing dearth of highly qualified persons except in the advanced castes and urbanized sections of the population. But there is no lack of effort on the part of the authorities of some universities, particularly in the non-metropolitan areas, to push in their own, often low-qualification candidates, sometimes in a blatantly unseemly manner. And the choice for the highest post, the vice-chancellorship, appears to be made in a manner where political considerations seem to weigh and, at least in Maharashtra, the choice is often deliberately tilted towards the middle castes.

To avoid repetition it is not proposed to go into the social change in the staffing pattern of secondary schools except to say that the process of "democratization" is much more in evidence here than in the institutions of higher education, but less so than in elementary education. We shall also not dwell much on the professions – law, medicine, etc. – where one finds the same trend. For instance, before Independence, the legal profession everywhere was mostly monopolized by the advanced castes. Now the situation is different in taluka and district places where they are being increasingly displaced by lawyers from the peasant and land-owning castes.

Women are an important element of the weaker sections of the population and it is worth studying their position in the literate professions. Although a few educated women had been taking up white-collar employment even earlier, particularly in schools in urban centres, their entry into office employment on an appreciable scale really started from the period of World War II. This was an index of the spread of secondary and higher education among women as well as of the extent of economic hardship due to the rising cost of living which made it difficult for the (lower) middle class to maintain their living standards. In the post-Independence period women have entered in large numbers in the clerical jobs in government, public sector and private sector offices, and also in the teaching profession in elementary and secondary schools. Their entry in jobs at higher levels is still insignificant and is mostly confined to those who have passed through the elitist channel of education. About the general recruitment of women in white-collar employment, the following generalizations appear to be justified. First, it is more in evidence in big cities and towns than in smaller towns and rural areas, it is in that descending order. Second, the social composition is still predominantly in favour of the advanced castes, which is a direct reflection of the corresponding character of the spread of women's education at the secondary and higher levels. Third, the share of women in the teaching profession at the higher, secondary, and elementary levels has considerably increased; for instance, in Maharashtra they account for approximately 18 per cent,⁶ 27 per cent and 29 per cent of teachers at these levels respectively. Finally, their occupation of a few very high positions both in the political sphere (e.g., MLAs; MPs; ministers and even the highest office in the land) and administrative sphere (e.g., the IAS, IPS, etc.) should not mislead us into the belief that it has brought about a corresponding change in women's social status in general, whether in the home or in society.⁷

LET ME NOW CONSIDER another dimension of social change which also has a long past and in which the spread of education has played an important part together with other factors, viz., the development of

⁶ *Statistical Abstract of Education*, Government of Maharashtra, for the year 1973-74.

⁷ See for a more detailed treatment, *Status of Women in India*, Indian Council of Social Science Research, Allied, New Delhi. Also A.R. Kamat, "Women's Education and Social Change," in *Social Scientist*, Vol. 5, No. 49, 1976.

modern industrial sector, the spread of monetized economy, modern rule of law, modern system of government, etc. These have given rise to a new mode of division of society, the division along class lines.

There are several dividing factors in modern society which result in social inequality, and create corresponding social hierarchies, the most important being education, income, occupation, and to these may be added property and (political) power. The social status of a person or the esteem he commands in society depends on all these together with his other achievements. In traditional Indian society all these, particularly education and occupation, were closely associated with the overriding hierarchy of caste, although the role of income, political power, and property (mostly in the form of land) was well recognized in determining social status.

With the establishment of colonial British rule this old hierarchical structure started changing under the impact of several factors mentioned above. Under the new dispensation several new occupations were added to the old occupational structure, and this changed considerably the occupational hierarchy, especially in its middle and higher reaches. The hierarchy in occupation and income now became much more associated with education than before. Moreover, education was no longer rigidly determined by caste. Thus the role of caste in determining occupation and income, and consequently the social status, began to weaken. Education also increased the occupational mobility of the individual and raised his earning capacity. In other words, a new dividing process started operating, giving rise to a new kind of social stratification based on education, occupation and income – in other words, the division of society along class lines: the upper, middle and lower classes or their further sub-divisions. (Lest there be misunderstanding, the term class is used here loosely and not in the Marxian sense, according to which classes are determined by the relations of production. The stratification in the Marxian sense also became more clearly identifiable with the advance of the monetized capitalist economy and industry.)

This new division of society along class lines first began to take shape in urban areas, particularly in the big cities and it slowly began to spread to smaller towns. Under its influence the old adage ordering occupations – "the best is agriculture, then comes trade and service is the last" had to become its reverse for retaining its validity! As regards its impact on caste, the process was (and is still) indeed slow

and the new hierarchy of class did not replace the caste structure; rather this new stratification superimposed itself on it and was taking place within as well as across the castes.

By the time of the transfer of power this process of stratification had developed to an extent where class became more, if not an equally important, attribute for classifying the urban population, while for the rural population the dominant stratification was on caste lines. In the post-Independence period, with further spread of education and much greater industrial and economic development, the stratification along class lines has strengthened and widened and is gradually penetrating the rural population.

As a result, there is an increasing differentiation within each caste along lines of social classes depending on education, occupation, income, and rural-urban place of residence. The process of differentiation varies from caste to caste, but the castes which have changed most are those which are more open to new influences (e.g., the Brahmins, Kayasthas, Nairs), that is, those which have taken to modern education and middle-class occupations and are urban in character.⁸

At the top of this new hierarchy, caste barriers now appear to give way (regional differences also are overcome to some extent) in respect of marriage. Among them the differences had almost completely disappeared for commensality even earlier; now they are disappearing for consanguinity as well. In cities and towns, commensality (having food together) has almost completely cut across the caste hierarchy except on ritual occasions. And consanguinity is trickling from the top layer downwards. Education and white-collar employment among young women have helped this process. This kind of social change, the division of population along classes or new socio-economic gradations, is also gradually reaching rural society, which still retains in a large measure the old division along castes.

THE KIND OF SOCIAL CHANGE which has been described and analysed above has inevitable consequences for the cultural sector, the ideological life of the people. For instance, it has very clear echoes in literature, particularly in *belles lettres*: the novel, short story, drama,

⁸ See, for instance, (i) George Rosen, *Democracy and Economic Change in India*, 1966, Vora & Co., Bombay; (ii) Andre Beteille, *Caste, Class and Power*, Berkeley, 1965.

and poetry. It is not my intention to dwell on the social change reflected in literature (the Marathi literature) of the post-Independence period, although it should be quite an instructive exercise. So as an illustration let me just mention a most significant development in it, the so-called *dalit* literature (the literature of the oppressed). A new generation of educated youth has emerged among the Scheduled Castes, a product of further spread of education in Maharashtra and Ambedkar's pioneering efforts in starting collegiate institutions at Bombay, Aurangabad and elsewhere. From the inherent contradiction between their desire for self-fulfilment, that is to take their rightful place on equal terms in society and the actual near-stagnant socio-economic condition of their kinsmen in urban and rural areas, has arisen the new voices of revolt: the radical Dalit Panther movement on the one hand and the literature of the oppressed on the other. The former is, at least for the time being, in a shambles. But if one reads their literature the first things that strike one are its freshness, its crispness, its tremendous power, and its new idiom.

What is its social content? Naturally, it depicts in full measure the unfathomable misery, the innumerable indignities, and the extreme inequities in the socio-economic life of their communities, particularly in the rural areas. And inevitably it is a voice of protest and confrontation. But what I find socially most significant is their attempt to identify themselves in general with all the deprived sections of society, to discover in their own sufferings the sufferings of all the downtrodden people. One of their oft-used symbolisms is the long and difficult struggle from darkness to light. This has, to my mind, a dual significance for the long and labyrinthine path of social change. On the one hand, it symbolizes the process of education, from the darkness of ignorance to the light of learning. On the other, it symbolizes the process of the social change that all of us so much desire in this country: from the darkness of poverty, hunger, and bondage to the light of happiness, freedom, and social justice.

Index

- Adult education, 10, 70, 194
- Agricultural innovations
 - Effects of research, 89-90
- Agricultural progress, 83-93
- Ahmed, Mazoor, 88n
- All India Association for Christian Higher Education, 182
- Ambedkar, B.R., 221, 257
- Anderson, C. Arnold, 76, 104
- Apprenticeship, 43, 101

- Badshahi Boarding House, Poona, 21-2, 24
- Bahirwadi village, 26
- Barefoot doctor, 19
- Basic education, 21, 152, 190-1, 195
- Berg, Ivar, 30, 40
- Beschi, Constantius, 172
- Beteille, Andre, 268
- Bhagwat, Acharya, 17, 23, 25
- Bhave, Vinoba, 146
- Bombay City Social Education Committee, 194
- Bordia, Anil, 190
- Bowman, Mary Jean, 76
- Browning, Elizabeth, 16
- Browning, Robert, 16, 26
- Buddhists, 227
- Bulcke, Father, 172
- Burger, Warrien E., 40

- Calcutta University Commission (1919), 204
- Carnegie Commission, 39
- Caste system, 120
- Castillo, Gelia T., 93n

- Castro, Fidel, 40, 41
- Central Advisory Board of Education, 191-2
- Centre for the Study of Developing Societies, Delhi, 138
- Centre for the Study of Social Change, Bombay, 143
- Change, Resistance to, 83-93
- Chaudhury, Nirad, 187
- Chitratai, 24
- Christians
 - Educational work, 167-89, 222; Attitude of others, 184-8; Early initiatives, 169-70; Expansion, 173-4; Future, 188-9; Introduction of English, 170-2; Objectives today, 180-1; Present involvement, 174-6; Service to nation, 181-3; Social justice, 183-4; Theological basis, 167-9; Traditional objectives, 176-80
- Church and education, 167-89
- Civil Rights Act, 1964, USA, 40
- Civil service, 37, 263
- Classroom reformation, 27, 34, 39
- Colonial rule, 69-70, 173, 267
- Comenius, John Amos, 30
- Committee on Differentiation of Curricula for Boys and Girls (1964), 214
- Committee on the Status of Women in India, 212, 216
- Communication network, 77, 84-7
- Communalism, 57-8
- Compulsory schooling, 27, 72
- Consumers' protection associations, 43
- Coombs, Philip H., 88n

Cooperatives, 92
 Corporate secrecy, 42-3
 Corruption, 75
 Cultural bridge roles, 86
 Curriculum, 7, 203, 207-8
 Curriculum, Hidden, 28-32, 34, 35
 Curzon, Lord, 145

Dabholkar, D.A., 124
 Dai-Ichi Hotel (Tokyo), 25-6
 Dalit literature, 269
 Dalit Panther, 269
 Dawood, A.R., 203
 'Day' celebrations, 12-13
 De Nobili, Roberto, 172
 Desai, I.P., 244
 Deshmukh, Gopal Hari, 213
 Deshpande, P.L., 14
 Development
 Definition, 76-7
 Development man, 77-82
 Attributes, 78-9
 Development women, 80-1
 DeWitt, Nicholas, 6
 Dhyaneswar, 220
 Doctors
 Migration, 127
 Dickinson, Richard, 177n
 Dropouts, 71-2, 122

East India Company, 170, 171, 173
 Economic development, 56
 Contours, 76-103
 Educated unemployed, 73, 75
 Education
 Aims, 118-19
 Babu Conception, 139
 Cost, 123
 Democratization, 258-9, 263, 265
 Disparities, 150-1, (t)157
 Equality of opportunity, 116-17, 122
 Expenditure, 140-1, 147, 149-50, (t)156, 173
 For agriculture, 87-9
 For equality, 211-18
 Growth, 147-57; Constitutional Directives' implementation, 147-

9; Enrolment, 148-9, (t)154-6;
 Schooling facilities, 147, (t) 153
 Hidden assumptions, 325
 Institutional functioning, 67
 National policy, 206
 Objectives, 132-8
 Problems, 132-46
 Production orientation, 129-30
 Proposed strategy, 151-2
 Rural areas, 259
 Social goals, 54-67
 Statistics, 71
 Thinking about, 48-53
 Word meaning, 33

Education and social change, 254-69
 Education and social justice, 113-23
 Education Commission (1966), 3, 73, 146, 160, 205-6, 208, 209, 210, 214
 Educational Conference (1948), 1
 Educational market
 Hidden hand, 35-9
 Educational reforms, 68-75
 Educational revolution, 1-13
 Educational year, 6, 11
 Eknath, 220
 Elementary education, 71, 104-12
 Functions, 107
 Local community, 108-9
 Elitism, 186-8
 Engineering education, 158-66
 Engineers
 Migration, 127
 Unemployment, 127
 English language
 Introduction, 170-3
 Evenson, Robert, 89
 Executives, 49-50
 Experience learning, 82

Farmers' education, 87-9, 255
 Farmers Training and Functional Literacy Project, 193-4
 Fein, L.J., 112
 Five Year Plan, 5th, 148, 149, 193, 210
 Free schools, 27, 32, 34
 Freedom, 62, 136
 Freedom of education, 174-5
 Freire, Paulo, 144, 145, 183

French Revolution, 38

Gadgil, D.R., 258-9
 Galbraith, J.K., 75
 Gandhi, M.K., 20-1, 26, 124, 130-1, 152, 191, 214, 221
 Gare, Govind, 226n, 228, 231n
 Generalists, 73
 Gilpin, Clifford, 95n
 Gokhale, Gopal Krishna, 257
 Gore, M.S., 54
 Govind Parulkar's Sahitya Academy, 232
 Grabe, Sven, 95n
 Grant, Charles, 170-1
 Great Training Robbery, 40
 Griggs et al vs Duke Power Company, 40
 Gross, Ronald, 32n
 Gujarat Social Education Committee, 194

Hagerstrand (Torsten) model, 83-4, 91
 Hard work campaign, 4
 Harding, Lord, 171
 Hidden curriculum, 28-32, 34, 35
 Hiray, Bhausahab, 22
 History
 Interpretation problems, 57-8
 Homework, 9
 Hostels, 10
 Housing, 45
 Human resources, 76-103
 Humanism, 61-2

Illich, Ivan, 27
 Indian Council of Social Science Research, 228, 234, 237, 238, 239, 241
 Indian Institute of Advanced Study, 138
 Indian Institute of Education, 24
 Indian National Congress, 124
 Informal sector, 94-7
 Information fields, 83-94
 Information system, 77-82
 Efficiency maximizing, 92-3
 Transmission, 82

Institutes of Technology, 158, 164
 International Commission on the Development of Education (1971), 49
 Interpersonal communication, 84-5
 Interstitial persons, 86

Jadhav, R.K., 226, 227
 Janata Party, 124
 Jesuit Educational Association, 177
 Job training, 129
 Joshi, Baburao, 17

Kamat, A.R., 254
 Kamraj, K., 263
 Kant, Immanuel, 136
 Karnataka Adult Education Council, 194
 Keer, Dhananjay, 220n
 Kilby, Peter, 100
 King, Kenneth, 95, 98
 Know-how acquisition, 97-103
 Knowledge, 120
 Koh, T.K., 96
 Kothari Commission, *see* Education Commission
 Krushchev, N., 51
 Küber, W.N., 221n

Land reform, 75
 Laxmanshastri Joshi's Prajna Pathshala, 142
 Learning, 41-2
 Limaye, Shirubhau, 226n, 231n
 Lindsay Commission, 174
 Literacy campaign, 9-10, 70

Macaulay, Lord, 171, 172, 173
 McLuhan, 31
 Mahatma Gandhi Vidya Mandir, 22
 Mahatma Jotirao Phule's School for Girls, 22
 Majumdar, Vina, 211
 Mamud, Syed, 170n
 Mandrain system (China), 37
 Mao Tse-tung, 19
 Marshall, T.H., 105

- Marx, Karl, 29
 Massachusetts Institute of Technology, 158
 Mathias, T.A., 167
 Mathur, Jagdish Chandra, 14
 Medical research, 44
 Mill, John Stuart, 68
 Minimum wage, 102
 Ministry of education, 1, 11, 23, 150, 196
 Moral values, 120
 Morley, John, 210
 Mouni Vidyapeeth, Gorgoti, 23
 Mudaliar, A.L., 204
 Mudaliar Commission, *See* Secondary Education Commission
 Myrdal, Gunnar, 25, 68
- Nag Chaudhury, B.D., 158
 Nai Talim, 152
 Naik, J.P., 1, 48, 52, 53, 104n, 143, 146, 170n, 254n
 On Christian educational efforts, 175, 184, 187-8
 On vocational education, 209
 Poona University convocation address, 211
 Profile, 14-26
 Naik, Chitra, 16, 24, 25
 Napoleon, I., 2, 37, 38
 National Committee on Women's Education, 214
 NCERT, 148, 215, 217
 National Policy on Education (1968), 206
 Nehru, Jawaharlal, 1
 Nehru Yuvak Kendra, 194
 New technology, 42-5
 Nonformal education, 122, 190-202
 As national programme, 194-5;
 Brahmanical tradition, 190-1, 195
 Conceptual elaboration, 191-2
 Implementation agency, 198-9
 Implementation strategy, 200-2
 Methodological issues, 196-8
 Quantitative projections, 196
- Teaching, 199-200
 Unresolved issues, 195-6
 And development, 193-4
 Nurullah, Syed, 170n
- Occupational hierarchy, 267-8
 Ostentation, 10
- Pandit, H.N., 147
 Parulekar, Godavari, 223, 232, 243
 Parulekar, Rambhau, 24
 Passive learning, 31
 Patel, Tara, 247, 250
 Pedagogy, 30
 People's Education Society
 Aurangabad, 221
 Personality goals, 62-6
 Phule, Jyotiba, 213, 220, 257
 Planners, 49-50
 Planning Commission, 3n, 11, 193
 Plato, 48
 Plunkett, H. Dudley, 86
 Political participation, 120-1
 Political parties, 120
 Poona University, 211
 Pope, G.U., 173
 Poverty, 45-6, 68
 Primary education, 70, 72, 126
 Professional education, 158-66
 Professional teachers, 43
 Proselytism, 185-6
 Public understandings, 51-2
- Quota system (USSR), 39-40
- Racial discrimination, 40
 Radhakrishnan, S., 204
 Rajaram College, Kolhapur, 18
 Ranade, Mahadeo Govind, 257
 Rashtra Seva Dal, 226-7, 231
 Rawls, 116, 117
 Reformed classroom, 27
 Rege, M.P., 113
 Religious discrimination, 220
 Research, 50
 Official attitudes, 50-1

- Researchers and interpreters, 50
 Rosen, George, 268n
- Sachs, Wolfgang, 32n
 Sadler Commission (1918), 214
 Sanskrit language, 130
 Sanskritization, 218
 Sardar, G.B., 220n
 Satya Shodhak Samaj, 257
 Satyagraha movement (1931), 18, 19
 Scheduled castes and tribes
 Aspirations of students, 228-9
 Conversion, 177-8
 Cultural disadvantages, 238-9
 Dealing with handicaps, 239-40
 Discrimination, 231-2
 Economic status, 229-31
 Education, 151, (t)157, 256, 259, 263-5, 269; Gujarat, 244-53; Maharashtra, 219-43
 Lack of guidance, 293
 Limited utility of education, 240-1
 Literacy rate, 245-7, 249-50
 Occupational mobility, 225-8
 Population; Gujarat, 245, 248
 Poverty, 237-8
 Religious discrimination, 220
 Reserved employment, 226, 263-4
 Social acceptance, 231-2
- Schrag, Peter, 34
 School dress, 10
 Schooling, Alternative to, 27-47
 Schultz, T.W., 79, 81
 Scientific rationality, 60
 Secondary education, 71, 72-3, 75, 104, 125, 203-10, 264-5
 10 + 2 + 3 pattern, 203-10
 Secondary education Commission (1952), 204-5, 214
 Secularism, 56, 58, 66, 180
 Sensitivity training, 31
 Sewagram, 221
 Shah, A.B., 132
 Shah, Vimal P., 247, 250
 Shahu Maharaj, 220
 Shramdan, 4, 9
 Silberman, Charles, 39
 Singh, Amrik, 140
- Singleton, John, 86
 Skinner, 31
 Social change, 254-69
 Social contents, 54-67
 Types, 57
 Social education, 190-1
 Social goals, 54-67
 India, 55-6
 Social inequalities, 56, 61-2, 267
 Social justice, 113-23, 183-4
 Social message
 Constraints, 66-7
 Social science
 Teaching, 58-9
 Socialism, 56
 Socialization, 59-61
 Socrates, 53
 Soft state, 75
 Srinivas, M.N., 218
 Standard of living, 126
 Stevens, Thomas, 172
 Subramaniam, Ka Naa, 171n, 178n, 185, 186, 187
 Sunita, 17, 22, 23
- Tagore, Rabindranath, 20-1
 Talisman, 130-1
 Tata Institute of Social Sciences, 138, 228
 Taub, Doris L., 96
 Taub, Richard P., 96
 Teachers, 36, 43, 66, 86, 109-10, 145, 199-200, 201, 203, 209-10
 Cost, 149-50
 Unionization, 109-10
 UGC scales, 209
 Teaching, 41-2, 123
 Technical education, 72, 75, 158-66
 Technocratic progress, 39-41
 Tertiary schools, 75
 Thoburn, Isabella, 178
 Tilak, Bal Gangadhar, 257
 Training, 118, 119, 129
 3 Rs, 106-8
 Trusteeship, 131
 Tukaram, 220
- Unemployment, 70, 88, 129, 145

- United Board for Christian Higher Education in Asia, 177
- United Nations, 112
 - World Plan of Action for the International Women's Decade, 215-17
- UNESCO, 49
- Untouchability Offences Act, 231
- University Education Commission (1948-49), 204, 214
- University Grants Commission, 142
- Valles, Father, 172
- Vocational education, 72, 75, 208-9
- Voltaire, 37
- Voluntary agencies, 194, 201
- Voucher plan, 27
- Ward, F. Champion, 48
- Weaker sections
 - Education, 151, 219-43
- Weber, Max, 77
- 'Week' celebrations, 12-13
- Wharton, Clifton, 79, 87
- Wilde, John C. de, 95n
- Women
 - Education, 80-1, 148-9, (t)155, 178, 183, 211-18, 255
 - Employment, 266
 - Literacy rate, 212
- Workers' education, 194
- World Conference on Literacy, 1975, Perspolise, 200
- Worldwide classroom, 27
- Wright Commission (Ontario), 39
- Xavier, Francis, 169, 171